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HEALTH RULES FOR THE COLD

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Agreed: deputy. Soviet Trade Minister S.D. Aleshin, Deputy Minister. Chairman of the Board of the Central Union E.V. Sazanov, Deputy. V.N. Poletkov, Deputy Chairman of the State Agricultural Industry of the USSR, Minister of Fisheries of the USSR A.N. Gulchenko.

Approved by the Chief State Sanitary Doctor of the USSR A.I. Kondrusev 29.09.1988.

SanPin dated September 29 . are introduced throughout the 1988 гUSSR in exchange for Sanitary Regulations for refrigeration companies from 13.07.64 N 481-64 from January 1 . to January 1990 г1. 1996 г

These Rules were developed and approved on the basis of the Ussr State Sanitary Supervision Regulation (p. 7 "a") approved by the Council of Ministers of the USSR resolution of May 31, 73 N 361.

ALL-EXCLUSIVE SANITARY-HEALTH And SANITARY-ANTIEPIDEMIC SDIS AND RULE

Violation of sanitary and sanitary and anti-epidemic rules and norms entails disciplinary, administrative or criminal liability in accordance with the laws of the Union of the USSR and the Union Republics ([Article 18](#)).

State sanitary supervision over the observance of sanitary and sanitary and anti-epidemic rules and regulations by state bodies, as well as all enterprises, institutions and organizations, officials and citizens is entrusted to the bodies and institutions of the sanitary and epidemiological service of the Ministry of Health of the USSR and the ministries of health of the Union Republics ([Article 19](#)) (Basics of the legislation of the Union of the USSR and the Union Republics on health care approved by the USSR Act of December 19 . and put into effect from July 1969 г1 1970 г.).

In order to protect the health of the population of the USSR, sanitary rules for refrigerators are established.

GENERAL PROVISIONS

1.1. These Sanitary Regulations apply to all refrigerator distribution, production halls, refrigeration plants, regardless of their departmental affiliation, and to newly built and reconstructed enterprises.

ConsultantPlus: Note.

[Sanitary standards](#) for the design of industrial enterprises, uv. The resolution of the State Building of the USSR dated 05.11.1971 N 179, expired on June 25, 2003, in connection with the publication of the [Decree](#) of the Chief State Sanitary Doctor of the Russian Federation on April 30, 2003 N 89.

The decree of the Chief State Sanitary Doctor of the Russian Federation dated April 30, 2003 N 88 approved and put into effect from June 25, 2003 Sanitary and Epidemiological rules "Hygienic requirements for the design of newly built and reconstructed industrial enterprises. JV 2.2.1.1312-03."

1.2. Construction of new refrigerators, as well as reconstruction of existing ones is carried out in accordance with the "Sanitary Standards of Industrial Design" CH 245-71, requirements of the heads of SNIP 2.11.02-87: "Fridges. Design standards, Manufacturing Buildings and Industrial Constructions. Design Standards, Administrative and Household Buildings, SNIP 2.09.04-87 "Rules of Device and Safe Operation of Ammonia Refrigeration Plants" (VNIKTYholodprom, 1981), "Rules of safety at Freon refrigeration units" (VNIKTYholodprom, 1988).

Ensuring the reliability of electricity supply is carried out in accordance with the PUE(Electroinstallation Regulations).

1.3. The fridge distribution is a warehouse-type facility designed to refrigerate perishable products, store ice cream and chilled products and provide them with a trading and public system power supply.

Distribution refrigerators and refrigeration plants follow the text under the general term "fridge."

2. DEMANDS TO TERRITORY

2.1. The fridge area should be designed to take into account the diversion of atmospheric, meltwater and water from the washing of areas and passages to the flood sewers and meet the requirements of the heads of the SNIP (sanitary standards and design) "General plans of industrial "Enterprises."

2.2. Roadways, footpaths, loading and unloading areas should be paved.

2.3. Free areas of the territory should be greened with wood and shrub plantations and lawns. On the territory of the enterprise it is necessary to provide recreational areas for workers.

2.4. To collect garbage, containers with lids on the paved or concrete area, the area of which should be at least in all directions from the base of 1 meach garbage collector. 25 м 10 percent chlorine lime solution or other decontaminated by the Ministry of Health of the USSR.

2.5. Containers are taken out by special vehicles, the use of which is prohibited for the transport of raw materials and finished products. When you collect garbage, garbage collectors should be delivered clean and disinfected. The sanitary treatment of containers is carried out by the Kommuntrans company.

2.6. The area of the refrigerator should be kept clean, cleaning is carried out daily. In the warm season, watering of the territory and green spaces should be carried out at least once a day.

3. SATOSING AND THE PRODUCTION OF THE

3.1. Manufacturing facilities should be insulated from other refrigerator premises.

3.2. When planning and placing production facilities on the refrigerator, workshops and offices should be placed in accordance with the requirements of existing sanitary standards and regulations for similar industrial enterprises.

Manufacturing facilities should be located in such a way that the processes are flowing.

4. REQUIREMENTS TO THE WATER AND SANDING

4.1. The water and sewerage systems of refrigerator buildings must meet the requirements of the Internal Plumbing and Sewerage Of Buildings.

4.2. Refrigerators should be provided with water smoothly and in sufficient quantities in accordance with the capacity of production processes. Water used for technological, household, drinking needs must meet the requirements of the current GOST 2874-82 "Drinking Water."

4.3. Refrigerators should be equipped with household and hot water systems, separate household and sewerage systems.

4.4. Estimated water consumption standards for washing of technological equipment, floors and panels of production facilities are defined by the "Technological Design Standards" of VTP 532/739-85 and recommendations on specific standards of water consumption in ice cream shops approved by Rosmyasomoltorg on October 1986 r29. (Apps1, 2).

4.5. Technical water can be used for compressor installation, watering of the territory, outdoor washing of cars; the water pipes of technical and drinking water should be separate and painted in a distinctive color, as well as have no connections among themselves. At the points of analysis of water should be specified: "Drinking," "Technical."

4.6. Water entering the refrigerator and used for technological purposes should be subjected to chemical at least once a quarter and at least once a month - to bacteriological research by the refrigerator laboratory or SES laboratories Contract.

4.7. Plant wastewater collection systems should be separate and join city-wide sewerage systems or have their own treatment plant system. Wastewater, containing a large amount of fat before release into the sewer network, is passed through the local internal fat-catchers (from the sausage shops, fat production, etc.).

ConsultantPlus: Note.

Rules for the protection of surface water from sewage pollution, the Ministry of Water, the Chief State Sanitary Doctor of the USSR, the Ministry of Fisheries of the USSR on May 16, 1974 N 1166-74, lost their validity in connection with the publication of the "Rules for the Protection of Surface Waters," the Soviet Union's State Natural Resources Ministry on February 21, 1991.

Since January 1, 2007, the legal relations on water protection are regulated by the Water Code of the Russian Federation.

On the issue of hygienic requirements for the protection of surface water, see Sanitary Rules and SanPin regulations 2.1.5.980-00, Uv. Chief State Sanitary Doctor of the Russian Federation 22.06.2000.

Wastewater is drained in accordance with the current "Rules for the Protection of Surface Water from Wastewater Pollution" (Ministry of Health of the USSR, 1974).

4.8. Contaminated wastewater from appliances and washing machines should be discharged into the sewers with an air break through individual and group hydraulic shutters located in heated rooms. The vertical gap is no 2 cm less.

4.9. Air-cooler sewer networks installed in cells with negative air temperatures should be equipped with heating systems or other insulation structures that protect pipes from freezing.

4.10. The refrigerator must record and record the emergency and repair conditions of the water and sewerage (Annex 3).

5. REQUIREMENTS TO COVERAGE, WARNING, VENTILATION And COLD

5.1. In food storage chambers, electric incandescent lamps or other light fixtures that are allowed for use in low-temperature rooms should be used. The lamps must have protective plafonds with a metal mesh to protect them from damage and glass on the product.

5.2. There should be sufficient natural or artificial lighting in the premises of the production halls to meet the requirements of SNIP II-4-79. Lights should have closed plafonds, preventing the possibility of lamps falling out of lamps, as well as accidental violation of their integrity, to reduce pollution and convenience of sanitary treatment. Lights should not be hung

under open and open closed containers used in the process.

5.3. Natural and artificial lighting should be provided in permanent workplaces, as well as at least 50 per cent of working hours and recreational facilities.

5.4. Electrolight fixtures should be wiped as pollution is as pollution, but at least once a month. Internal window and lamp glazing, frames washed and wiped at least once a week, from the outside - at least twice a year, and in the warm season - as pollution.

5.5. Light washes are prohibited from cluttering with containers, equipment, etc. both inside and outside the building. It is not allowed to have broken and cracked glass in light openings, as well as to replace them with opaque materials.

5.6. Manufacturing facilities must be provided with heating in accordance with the requirements of SNIP 2.04.05-86.

5.7. Heating appliances in all rooms should have a smooth surface and be accessible for cleaning, inspection and repair.

5.8. Natural, mechanical or mixed ventilation should be provided in the production facilities, which must meet the requirements of the existing sanitary design standards for similar industrial plants and SNIP 2.04.05-86.

5.9. For open-process workshops, mechanical ventilation systems should be used to clean the external air from dust by installing filters. The air inflow for production facilities should be collected in the area of the least pollution at an altitude of no less than from the 2 m ground.

5.10. Vent channels, ducts from refrigeration technology equipment must be decontaminated at least once a year by aerosol disinfection using the means authorized by the Ministry of Health of the USSR for these purposes, as well as in the case of unsatisfactory results of microbiological studies of air and walls of refrigeration chambers and production facilities.

5.11. Air temperature and relative humidity in production facilities must meet the requirements of technological guidelines for the production of certain types of product, as well as applicable sanitary regulations and regulations for similar Enterprises.

6. REQUIREMENTS TO COLD CAMERAS

6.1. All refrigerator cameras must have appliances that measure temperature and humidity, and cameras with a temperature of 0 degrees. C and below should be equipped with a "Man in the Camera" alarm system. The doorways of the chambers should be provided with tarpaulin curtains or air curtains with the mechanism of turning them on when opening the doors.

6.2. The walls of refrigeration chambers can be plastered, painted with oil paint, lined with glazed tiles or other materials permitted by health authorities for this purpose, and should be convenient for cleaning, washing and disinfection.

6.3. The floors in the cells should be waterproof, without cracks, holes and potholes.

6.4. Cleaning the cooling batteries from the "snow coat" thick is more 20 mm carried out either by sweeping hard brooms with the obligatory coating of food with clean tarpaulin or plastic wrap, or by heating by supplying them with hot refrigerant fumes before melting the ice crust and falling it together with a "snow coat" which are then removed from the chamber.

6.5. When the surface of the air coolers is automatically thawed from the "snow coat" with electric heating or hot refrigerant vapors, the device's design provides for the collection of meltwater in the pallet, which through the piping system is removed to the sewers.

6.6. Refrigeration chambers, tambourines and doors, adjacent corridors, lobbies, platforms and other premises must be repaired, whitewashed, painted, dried and necessarily disinfected.

The air in the refrigeration chambers should not have a foreign smell. If there is a foreign odor, it is necessary to ventilate or zone the cameras in accordance with the requirements of the current Instructions for the zoning of refrigeration chambers and warehouses, 1970 г.

6.7. Microbiological monitoring should be carried out in chambers with an air temperature of minus 12 degrees. C and below at least once a quarter and in chambers with temperatures minus 11.9 degrees. C and above at least twice a quarter with the obligatory fixation of

microbiological analysis results in the journal ([Annex 4](#)).

7. REQUIREMENTS TO READ, COLD TREATMENT, READ MORE AND THE DOE

7.1. Acceptance, placement and styling, product and veterinary-sanitary examination of food products on the refrigerator, their refrigeration, storage and leave are carried out in accordance with the current regulatory and technical documentation and technological instructions for certain types of products.

Refrigeration and storage of food in cells that do not meet sanitary requirements is prohibited.

The results of the examination of incoming food are recorded in special journals.

Laboratory control over the quality of food in the process of receiving, storing and leaving should be carried out in accordance with the current instructions for certain types of products.

7.3. When storing food in refrigeration chambers, temperature and humidity regimes established by current standards and technological instructions for each product must be observed.

7.4. All products, except chilled meat and cheeses without containers, should be stored in dense sustainable stacks. The front side of the stack, facing the aisle or passage, should be flat, without ledges.

In the party mode of storage to each batch of products stacked in the stack, the label of the established form should be attached from the passage (pass), which is retained until the end of the implementation of the batch.

Some of the products, designed to check the quality and mass, marked with the stamp "K" (control), are stacked with a stencil to the passage (passage) or on individual trays so that free access to these places is provided. Control seats should be retained until the end of the implementation of the entire party.

7.5. Products should be stacked on pallet, and in the absence - on slats, the minimum distance of which from the floor should be 0.10 - 0,15 m. . In the cells width of 12 - provided for one 18 m passage, in cells width more than every two flights 18 m (on 6 m) left one passage. 100 KB. M 1,6 M batteries.

Departures from walls, floors, batteries, air coolers and storage conditions for chilled and frozen food are set in accordance with the requirements of the current instructions ("Inter-industry instructions on the definition of containers refrigerators, M., 1978, "Instructions on receiving, refrigerating and storing perishable products in distribution refrigerators of consumer cooperation," M., 1988).

The height of the stack should be determined from the maximum use of the height of the cargo volume of the camera, taking into account the strength of the container and the allowable load on the 1 KB. m floors.

7.7. During loading and unloading of products, it is forbidden to store it directly on the floor of the platform, corridors and cameras and to move it on the floor by wire.

7.8. When loading into one refrigeration chamber batches of food that vary in shelf life, batches with a shorter shelf life are placed closer to the unloading site.

7.9. Products that have been placed on the fridge in a contaminated state with obvious signs of corruption, affected by mold or with uncharacteristic foreign odors, must be placed in the chamber of defective goods or in other specially allocated for this purpose until the question of whether they can be used is resolved.

7.10 The quality of products on leave from the fridge should be determined by experts in accordance with the requirements of standards and technical conditions. Each batch must be accompanied by a quality certificate ([Annex 5](#)).

7.11. Monitoring the sanitary condition of the cameras, the conditions of food storage and the frequency of inspection of their quality should be carried out in accordance with the

requirements of the existing departmental technological instructions and NTDs.

8. REQUIREMENTS TO PRODUCTION CECHAM. GENERAL REQUIREMENTS

8.1. The refrigerators may include the following production facilities: oil and oil pumping, for the production of meat semi-finished products, sausage, bone flour and bone fat, fast-frozen fruits, berries and vegetables, by production of dry ice, ice cream, small packages of fish products, sawing of frozen fish and others provided by the individual task for design.

8.2. The walls of all production facilities of the workshops should be lined with glazed tiles at a height of no less, the ceilings and walls above the 2 m panel are whitewashed, painted with glue or water emulsion paints.

8.3. In places of movement of outdoor transport, the corners of columns should be protected from damage by fencing structures to 1,5 m height, and in places of suspension transport - to 2 m height.

8.4. Floors in the production facilities should be non-slippery, acid-resistant, waterproof, have a flat surface without potholes, with a slope and equipped with ladders for draining liquid. The slope of the floor to the ladder should be at least 0.5%.

Production in production facilities is not permitted during repair work.

The location of production facilities in the basement is not allowed.

9. NEW NEEDS TO THE TECHNOLOGICAL PROCESSES PRODUCTION HALLS

Sanitary and hygienic requirements for the production of food products on refrigerators comply with the current sanitary standards and regulations for similar industrial enterprises, as well as NTDs for this type of product.

9.1 Production Requirements large-piece semi-finished products

Semi-carcasses designed for the manufacture of large-piece semi-finished products should be defrosted in defroster.

Half-carcasses coming to the defroster along the suspension paths should not come into contact with the floor, walls and technological equipment.

Unfrozen, as well as chilled meat before cutting is exposed to a dry toilet with a cut of the mark, then if necessary - a wet toilet at water temperature 25 - 30 degrees. C using a "soul brush."

The collapse and veining of meat is carried out on boards of hard woods or synthetic materials, authorized by the Ministry of Health of the USSR.

Divided meat, laid in trays, should be delivered either in the implementation or for short-term storage in a cell with a temperature of 0 /- 6 degrees. C.

9.2. Sausage production

Raw materials that meet the requirements of the current regulatory documentation should be used for the production of sausage products.

Auxiliary materials entering the workshop for processing are sold, stored and prepared for production in conditions that exclude their contamination. The free packaging is immediately removed from the production room.

In the raw material shop (or compartment) the carcasses are cut (separation of carcasses, half-carcasses or quarters into parts according to the established cutting scheme), the collapse of meat (separation of muscle, fat and connective tissue of carcasses from the bones) and the vein

of meat (removal from the collapsed meat fat, cartilage, tendons, film, large blood and lymph vessels, blood clots, small bones).

The slingers must have safety gloves and ring or shell mesh that protect the fingers of the left hand and stomach. It is not allowed to transfer and pull pieces of meat with a knife, carry knives behind the shin of the boot, behind the belt, in hands, to shove knives and keep them on the table.

The technology of sausage production consists of the following stages: pre-chopping and salting of raw materials, compilation of minced meat, filling shells with minced meat, sediment of batons.

At the end of the ambassador by clattering (simultaneous grinding and stirring) sausage mince is prepared according to the recipe provided by technological instructions.

The temperature of the mince at the end of the cutter should not exceed 18 degrees. C, the temperature in the shop - no higher than 12 degrees. C.

The filling of shells (guts, bladders, pork stomachs and artificial shells) is made on pneumatic, hydraulic, mechanical, vacuum syringes and on flow-mechanized lines.

The temperature in the raw materials shop is 12 degrees. C, relative humidity is 70%. The minced loaves are moved to the sedimentary chamber or thermal unit.

Thermal treatment is carried out in stationary roasting and cooking chambers, combined chambers and continuous thermal units with automatic regulation of temperature and relative humidity. Cameras should be equipped with devices to control and regulate temperature and relative humidity. Thermal treatment modes (temperature and processing time) should be observed in thermal journals. Thermal treatment of boiled and semi-smoked sausages, sausages, sausages includes roasting (hot smoked) and cooking. Roasting is done at 80 - 110 degrees. C for 60 - 140 minutes. Depending on the diameter of the shell, the temperature inside the loaf reaches 40 - 45 degrees. C.

Cooking boiled sausages, sausages, sausages is made at a temperature of 75 - 85 degrees. C to bring the temperature inside the loaf to 70 - 72 degrees. C, for semi-smoked - up to 68 - 72 hail. C, boiled-smoked - up to 68 hail. C, Libere - up to 72 hail. C. Boiled sausages, sausages, sausages after cooking are subject to rapid cooling.

9.3. Bone flour and bone fat production

Bone after collapsing (food) should be used for its purpose no later than 2 - 3 hours. C no more than a day.

Raw materials, intended for the processing of bone into bone flour and bone fat, should be delivered directly to processing in clean special containers after the collapse.

The bone processing line includes the following technological equipment: hoarding table, power grinder, elevator, dehydrator, fat picker, septic tank, re-shredding top, bunker, centrifuge, centrifuge collection for centrifuges bones and a septic tank, a three-section continuous dryer, a crusher, a sieve and a separator.

The crushing and sawing of bones designed to top off fat, as well as the grinding of dry skimbone are made in a separate room of the fat shop.

All other processes for the production of dietary fats from raw fat and bone are allowed to be produced in one room. The most hygienic way to topoff fat is to produce fat on closed line-by-line.

In any way of fat melting, the use of fresh fat raw materials, freed from cuts of meat and washed in running water, is a prerequisite.

9.4. Hygiene requirements for ice cream production

The production of ice cream is carried out in strict compliance with the existing "Sanitary Rules for Ice Cream Enterprises", 1971, and "Technological Instructions for the Production of

Ice Cream," 1988.

Ice cream technology includes raw materials preparation, mix preparation, filtering, pasteurization, homogenization (for milk-based blends), cooling, storage, blending, packing, tempering, pre-hardening of ice cream.

The raw materials coming for the preparation of the mixture must meet the requirements of the regulatory and technical documentation (GOST, OSTs, PCT, TU).

After cooking, the mixture is filtered and sent for pasteurization.

Disk, flat, plate, cylindrical or other filters are used for filtering. Filtering materials in filters periodically clean or replace, preventing the accumulation of sediment. In the absence of special filters, the mixture is filtered through a lavender or gauze, folded into several (from 2 to 4) layers.

The mixture is pasteurized in continuous action devices - automated plate pasteurization-cooling installations, tubular pasteurizers, pasteurizers with a displacing drum, as well as in devices of periodic action - baths with a snake-like stirrer, a long-term pasteurization bath, steam boilers, etc.

On pasteurization-cooling machines the mixture is pasteurized at a temperature of 80 to 85 degrees. C with an exposure of 50 to 60 s.

To avoid a burn to the plates, the mixture must be fed into the machine continuously.

Pasteurization in tubular pasteurizers is carried out at a temperature of 92 to 95 degrees. C without exposure. In pasteurizers with a displacing drum, the mixture is pasteurized at a temperature of 80 to 85 degrees. C with exposure from 15 to 20 s.

The following pasteurization modes of ice cream mixtures are used in periodic devices:

68 to 72 degrees. C exposure from 25 to 30 minutes;

73 to 77 degrees. C exposure from 15 to 20 minutes;

78 to 82 degrees. C exposure from 8 to 10 minutes;

at temperatures of 83 to 87 degrees. C exposure from 3 to 5 minutes.

If used as a flour and cornstarch stabilizer, the pasteurization temperature should be 85 to 95 degrees. C.

Homogenization is carried out at a temperature close to pasteurization, it is not allowed to cool the mixture.

After homogenization, the mixture is cooled to a temperature of 2 to 6 degrees. C.

The cooled mixture is sent to special heat-isolated tanks or to drain-ripening baths for short-term storage.

The mixture can be stored at a temperature of 4 to 6 degrees. C no more than 24 hours, at a temperature of 0 to 4 degrees. C - no more than 48 hours.

At the same time, sanitary requirements and technological regimes should be strictly observed in order to avoid a sharp increase in bacterial insemination of the mixture.

Storage is a mandatory stage of the process only for ice cream blends prepared using gelatin (stabilizer). Such mixtures must be sustained at a temperature not higher than 6 degrees. C for 4 - 12 hours For mixtures prepared with other stabilizers, storage before freeing is not a requirement.

After freeing, the packaged ice cream is tempered in the airstream by temperatures ranging from minus 25 to minus 37 degrees. C in special freezers.

Weight ice cream, and in the absence of refrigeration machines and fine-packed ice cream is tempered in freezing chambers with an air temperature not higher than minus 20 degrees. C, and in the absence of two-stage compression compressors - no higher than minus 18 degrees. C.

The temperature of the weight ice cream after tempering should be no higher than minus 12 degrees. C, the temperature of packaged ice cream is not higher than minus 10 degrees. C.

Before the room in the storage room packaged ice cream is pre-filled. The duration of pre-tempered packaged ice cream is from 24 to 36 hours.

The tempered ice cream is placed in a storage room. Storage should be carried out at a temperature not higher than minus 20 degrees. C, and refrigerators that do not have two-stage

compression compressors, at a temperature not higher than minus 18 degrees. C.

The shelf life of the ice cream is determined by its type and must meet the requirements of the current standard.

Microbiological control of ice cream production should be carried out by a microbiologist in accordance with the "Microbiological Control of Ice Cream Production Instruction" approved by the Ministry of Trade of the USSR, the Ministry of Meat and The USSR Ministry of Foreign Affairs and agreed with the Ministry of Health of the USSR in 1976 r.

The total number of microorganisms in ice cream of all kinds should not exceed 100 thousand. Cells in 1 ml, titer bacteria of the E. coli group should be no lower than 0.3; the presence of pathogenic microflora is not allowed.

9.5. Hygiene requirements for the production of packaged oil

The oil selected for packaging enters the defrost chamber.

The air temperature in the oil degrowth chamber is maintained from 15 to 18 degrees. C.

The degrowth of the oil should last no more than eight days and end when the temperature within the monolith is reached: for all types of oil, except peasant, 6 to 9 degrees. C, and for the peasant - from 10 to 12 hail. C.

The creamy packaged butter is produced by netted briquettes from 0.1 0,25 кгто, packed in parchment or coughed foil.

The oil, packaged on refrigerators, is refrigerated at a temperature of minus 18 degrees to complete the process. C and below.

The shelf life of packaged oil is calculated from the day of packing and should not exceed 10 days.

Before going to the trading network packaged butter stored at a temperature not higher than minus 12 degrees. C.

In the expedition chamber it is allowed to store it during the day at a temperature not higher than minus 5 degrees. C.

9.6. Hygiene requirements for fruit and vegetable production Frozen products

Production of fast-frozen vegetables, berries, semi-finished products and dishes from them is carried out in strict compliance with the sanitary and hygienic regime of production in accordance with the current "sanitary rules for enterprises producing canned fruit, dried fruits and potatoes, sauerkraut and salted vegetables," "Instruction on sanitary processing of technological equipment and equipment in the canning plants", as well as in the current regulatory and technical documentation.

Raw materials for the production of fast-frozen products must meet the requirements of the current standards or technical conditions on them.

Raw materials that do not meet the requirements are not allowed to be processed.

All incoming vegetables, fruits and berries are sorted by hand on tables or sorting and inspection transporters. Mint, sluggish, immature, mechanical damage and agricultural pest-damaged products are removed.

The calibration of raw materials in size, depending on the type, is carried out manually or on calibration machines.

Vegetables, fruits and berries should be thoroughly washed until the contaminants are completely removed.

Cleaning and cutting is done by hand or in machines, depending on the type of vegetables, fruits and berries.

Blanching raw materials are carried out in hot or boiling water or spicy steam depending on the type and maturity of vegetables, fruits and berries.

After blanching, the raw material is cooled in running water to a temperature of 10 - 20 degrees. C.

Removal of moisture from the surface of vegetables, fruits and berries before freezing produce air at a speed of 10 q/- 1 m/s. Then the raw material is inspected on a transporter with a magnetic device and sent to freeze.

Vegetables, fruits and berries after technological preparation are frozen in continuous or periodic refrigeration machines at a temperature of minus 30 degrees Celsius. C or in a chamber freezer at a temperature not higher than minus 24 degrees. C and forced air circulation.

Freezing is considered complete when the pre-package or layer of vegetables (fruits, berries) temperature is reached in the center of the pre-package or minus 18 degrees Celsius. C.

Packaging, packaging, labelling and storage of frozen products are carried out in accordance with the requirements of the NTC for these products.

10. NEW NEEDS TO THE EQUIPMENT AND THE

Equipment, equipment, packaging and packaging must be made from materials authorized by health authorities for use in contact with food.

10.2 Equipment in production facilities should be placed in accordance with the technological requirements of the project, as well as compliance with technological processes that exclude headwinds of raw materials and finished products and provide free access for workers and sanitary workers and safety conditions.

10.3. Inventory (grids, pallets, racks, etc.) are made from materials that are easy to wash and disinfect. Inventory supplies should be stored in a separate room.

10.4. Meat suspension hooks must be made of stainless steel, and puddles are allowed.

10.5. Inventory, containers and intra-warehouse transport (carts, electric cars, etc.), made of metal, must have anti-corrosion coatings authorized by the Ministry of Health of the USSR.

10.6. The refrigerators should be provided with a room for washing trucks, equipment and revolving containers, equipped with a liner of hot steam, hot and cold water, a ladder for draining water into the sewer.

11. DEMANDS TO THE MEDIA

11.1. Special transport is allocated for food transport.

11.2. Transportation conditions (temperature, humidity) must meet the requirements of NTDs (GOSTs, OSTs, etc.) by types of products, as well as rules for transporting perishable goods by different modes of transport.

11.3. Transport used for food transport must be clean, in good condition and have a sanitary passport issued by a territorial sanitary and epidemiological station for a period of no more than 6 months.

It is forbidden to load food on transport that does not meet sanitary requirements and in the absence of a sanitary passport on it.

Washing and processing of transport intended for food transportation should be carried out in car farms.

11.4. The driver-expeditor must have a personal medical record, provided with special clothing by the administration of the car farm.

11.5. Control of the sanitary condition of incoming transport, the conditions of loading products are carried out by the veterinary service of the enterprise and the departmental sanitary service.

12. REQUIREMENTS TO THE PRODUCTION INADOORS, EQUIPMENT AND ARTEMY

12.1. Before washing and disinfecting, the production facilities and refrigerator premises should be carefully cleaned.

Special staff should be allocated to clean the production and support facilities and should not be used for production work.

12.3. The cleaning of the floors in the cells and corridors is carried out as they are contaminated, after loading and unloading work, but at least once a shift.

12.4. Ladder scars and cargo elevators for lifting products must be cleaned as they are contaminated (wet cleaning), but at least once a shift.

12.5. The detergents and disinfectants used on refrigerators are presented in [Appendix 6](#). In addition to the items on the list, other items authorized for this purpose by the Ministry of Health of the USSR can be used.

12.6. Disinfection of refrigeration chambers is carried out:

After the cameras are freed from the cargo and when preparing the refrigerator for mass delivery;

- when there is visible growth of mold on the walls, ceilings, equipment and equipment of cameras;

- If the moulds of stored goods are affected;

Unsatisfactory analysis of the walls and air of the chambers.

The need for disinfection is established by the veterinary and sanitary service of the refrigerator.

Once disinfected, it should be determined to be effective in accordance with the "Instructions for the identification and evaluation of the contamination of the walls and air of mold refrigeration chambers" ([Annex 7](#)).

12.7. For disinfection, the refrigerator administration allocates a specially trained brigade, which is supplied with a tool, special clothing, glasses, gauze bandages or respirators, gas masks. The team is instructed on the procedure of disinfection by a safety engineer.

12.8. Before disinfecting the camera with low sub-zero temperatures in the absence of ice and snow on the ceiling and walls enough to heat to minus 3 - minus 5 hail. C.

Cameras with sub-zero temperatures heat up to plus temperature if it is impossible to mechanically clean from ice and snow ceilings and walls of cameras.

12.9. Disinfection cameras completely exempt from all cargo, padding and empty containers.

12.10 Mechanical cleaning of the chambers includes clearing the chambers of snow and ice, clearing walls, ceilings and columns of pollution.

12.11. Cleaning the chambers from ice, snow and food residues is made by scrapers, brooms and hard brushes.

Mechanical cleaning of walls, ceilings and columns is done especially carefully in places of visible mold growth.

12.12. In order to avoid spraying the whitewashing in the chambers, the ceilings and walls should be sprayed with water or a lightened chlorine lime solution containing 0.5 per cent active chlorine.

12.13. With severe mold contamination, the chambers are mechanically cleaned, washed with a 1.5 per cent solution of sodium oxidephenolat eferand and then treated with a whitewashing mixture with the addition of a 2 per cent solution of this drug or other mycoseptics.

12.14. At the end of the cleaning, the removed plaster and mold are carefully collected and removed from the chambers.

12.15. The disinfection of the cameras is carried out in a wet way by spraying disinfectant solution using paint and hydroremotes and aerosol, using the spray y10-FUE and other installations and sprinklers.

12.16. When disinfecting the refrigeration chambers, first process the walls, ceiling, then floor, starting from the far seats in relation to the exit. Disinfectant solution is applied to the

surface with a solid layer until a light visible hydration. The disinfectant consumption of aerosol disinfection is 60 ml 1 кв. м; when wet - up to 0,5 л 1 кв. м.

12.17. Cleaning and disinfectants are stored in a dry, well-ventilated room equipped with racks, which prohibits the storage of food and food.

12.18. Chlorine lime is stored in factory packaging in closed, darkened and well-ventilated rooms. It is not allowed to store in the same room with chlorine lime flammable substances, lubricants, metal products, cylinders with gases and caustic alkaline.

12.19. Trichlorolycyanuric acid and sodium dichlorosocyanate are stored in the manufacturer's container in the absence of acid and alkaline vapors (especially ammonia vapors) at temperatures of minus 40 to 40 degrees. C.

12.20 The storage conditions for the disinfection should protect the container from moisture.

12.21. Those involved in the preparation of chlorine-containing solutions, antiseptol, sodium oxidephenolate and disinfected by these means should be provided with protective equipment and safety regulations.

12.22. The effectiveness of disinfection of refrigeration chambers, production facilities is controlled by the bacteriological laboratory of the refrigerator, and in the absence of such - the laboratory of the sanitary station under contracts.

Disinfection is recorded in the journal ([Annex 8](#)).

12.23. The foreman is responsible for the timeliness of disinfection and quality; for the safety of workers who produce disinfectants - refrigerator safety engineer.

12.24. Once a month, a sanitary day is set up in the refrigeration shops for general cleaning.

12.25. Meat semi-finished meat production, sausage, bone flour and bone fat production.

Technological equipment, equipment, utensils of the sausage shop, meat semi-finished workshops, bone flour and bone fat workshops should be subjected to a thorough washing and disinfection every day after the end of work in accordance with the "Instructions on washing and preventive disinfection in the meat and poultry processing industry."

The washing of inventory and dishes is carried out after the end of work of each shift, and when the work stops for 2 hours or more - immediately after the stop; preventive disinfection - once a week or more often at the direction of the veterinary and health service.

When stopped for more than 2 hours of work, the technological equipment, directly in contact with food raw materials, is immediately washed with warm water to remove the residues of raw materials. Technological equipment is washed with detergents every day. The washing of technological equipment is carried out in the following order: disassembly, careful mechanical cleaning, washing with warm water, skimming and final washing with hot water. Cleaning, washing and skimming disassembled parts of equipment are done in mobile baths and trolleys. Preventive disinfection is carried out once a week or more often at the direction of veterinary or sanitary supervision.

The consumption of detergents is determined by the calculation 2 л on the 1 кв. м 1 л 1 кв. м surface; non-contact with the raw surface skim on the basis of the 0,5 л solution on the 1 кв. м surface.

Undequirable pipes are washed with warm water from the residues of raw materials and then, inserting stubs, pour for 2 - 4 hours alkaline solution. After treatment with lye, the pipes are thoroughly washed with hot water and disinfected for 15 to 20 minutes. sharp steam. If the diameter of the pipeline allows, a machine is used for sanitary treatment to wash the descents.

Disassembled pipes first wash from food residues with cold or warm water, then disassemble and clean inside with brushes on a long handle and washed in the bath with a hot alkaline solution. After treatment with lye, the pipes are thoroughly washed with water and disinfected with a dipping solution containing 0.2% active chlorine. Allowed after washing, skimming and assembling disinfect the pipeline in the collected form of a sharp steam for 15 - 20 minutes.

After sanitary treatment, visual, chemical and bacteriological control of the quality of treatment is performed.

On visual inspection, the quality of cleaning of processed technological equipment and equipment, clean floors, walls, etc. are revealed. There is a degree of cleaning of the surfaces of objects from blood, mucus, meat trimmings, canygas, fat and other contaminants. Particular attention is paid to hard-to-reach places and corners in rooms, equipment and equipment. Visually assess each sanitary treatment after it is carried out.

For chemical control periodically, but at least once a week, in clean flasks or bottles with worn or rubber corks take away 500 ml of detergent and disinfectant solutions and sent to the chemical laboratory to determine the content in them chemicals. Control of the quality of laundering (on residual lye) of equipment and equipment from the skimmer alkaline solution is carried out directly in the shop after washing.

The presence or absence of residual lye on the equipment is checked with the help of an indicator litmus paper or in flushes from the equipment with phenolphthalein.

To control with the help of litmus paper immediately after washing to the wet surface of the area of equipment under control, apply a strip of indicator litmus paper and press tightly. Painting the litmus test in blue indicates the presence of residual alkalinity on the equipment. If the color of the piece of paper has not changed - there is no residual alkalinity.

If you use phenolphthalein to a portion of flushwater 40 - 50 ml in a glass cup add 2 - 5 drops of 1 percent alcoholic solution phenolphthalein. If there is residual lye in the water, the liquid in the cup is colored pink in one or another intensity, depending on the concentration of lye.

Bacteriological control of the quality of sanitary processing of equipment and equipment is carried out weekly.

12.26 Ice cream shop.

All equipment and equipment used in the production of ice cream must be subjected to careful mechanical cleaning and washing immediately after the end of work.

Equipment and inventory washing includes:

Rinse pure cold (temperature 18 - 20 hail. C) or warm (temperature 40 - 45 hail. C) water to remove product residues.

Wash with an alkaline solution with a temperature of 55 degrees. C containing 0.5% calcified soda.

Rinse with hot water with a temperature of 60 - 65 hail. C until the lye is completely removed.

Disinfection of steam or lightened with chlorine lime solution (150 - 200 mg of active chlorine per 1 л water).

Pipelines and equipment that are being dismantled should be washed in disassembled form.

All small parts of the machines, disassembled pipes, small equipment after washing with water and hot alkaline solution are treated with steam or boiling in special closed boxes for 10 minutes.

The collected pipeline inside should be steamed by a sharp steam for 2 minutes. In the absence of steam, the collected pipes are treated with chlorine lime solution for 10 minutes, then hot water (water temperature 60 - 65 degrees. C).

The following washing order is required for the unheated washing of piping (metal and glass)

- washing cold (temperature 18 - 20 hail. C) water 3 - 5 minutes;
- washing 0.5 - 1 percent solution of calcified soda or 0.15 percent caustic soda solution with a temperature of 50 - 55 degrees. C - 15 - 20 minutes;
- washing with hot water with a temperature of 60 - 65 degrees. C;

Sterilization:

(a) Metal piping - steam for 5 - 7 minutes;

b) glass piping - chlorinate solution hypochlorite (concentration 200 mg/l) for 10 minutes;

- rinse with cold water.

Wash the friser: after the friser and release it from ice cream, the friser is rinsed with cold,

then warm water, then washed with alkaline solution and hot water. Before washing with hot water, it is necessary to remove the refrigeration agent from the shirt space of the freer of direct evaporation. Then the friser is disinfected for 5 - 10 minutes. and rinsed with clean water.

Washing tanks (tanks) and milk tanks is as follows: after release they are rinsed outside and inside with cold water, and then washed with hot alkaline solution with a brush with a long handle. It is allowed to be a worker dressed in special sanitary clothes (boots and overalls), to be inside a tank or tank for their thorough washing. After washing the tank rinse dread with hot water and steam, and also process a solution of chlorine lime, then rinse with water.

The washing of tanks can also be done mechanically through detergents.

The pasteurizer is disinfected after pre-washing.

The open cooler is washed all over the surface with cold water, hot soda solution, followed by rinsing with hot water in abundant quantities.

Before starting work, as well as before filling the mixture, the equipment should be rinsed with hot water.

Casings and flasks coming from the retail network, pre-preparation should undergo preventive repair - correction of deformities, etc., after which the washing and disinfection are made, followed by rinsing with hot water or a park.

The trays before laying the ice cream should be washed with hot soda water, followed by rinsing with clean cold water.

Knives used in production must be treated with steam or hot water.

Pipes for assembly should be stored on racks, and small equipment - in cabinets.

Filter filters or gauze used should be washed with hot water with a temperature of 60 - 65 degrees. C. Marle also needs to be boiled for 15 minutes.

12.27. A chain for the production of fast-frozen fruits, berries and vegetables.

Sanitary processing of technological equipment and equipment of the workshop for freezing the fruits of berries and vegetables is carried out: when transferring from one shift to another shift; When the machines for cutting vegetables, tops, transporters stop working for more than 30 minutes; transition to a different type of product.

Machines for calibrating, washing, cleaning and grinding vegetables and fruits, crushers, ejaculators, stone-cutting, potato-cleaning, thermal or chemical processing devices for fruits and vegetables during sanitary treatment free from residues vegetables, fruits, soil, washed with a jet of cold and then warm water, applying brushes, then rinsed with unheated water.

When sanitary treatment of the machine (except brush-washing) washed with cold and warm water with the addition of detergents and treated with one of the disinfectants.

After cleaning and washing, the clean-washing machine is filled for 15 minutes. Then the solution is drained, the machine is filled with warm water and for 5 minutes the brushes are removed.

To handle open, smooth, made of metal, glass, plastic, rubber surfaces are applied with a spray or brushes a solution of detergents or disinfectants on the 0,5 л 1 кв. м surface. 1 л 1 кв. м

After sanitary treatment, selective microbiological control of the sanitary condition of the equipment should be carried out in accordance with the "Instruction on sanitary treatment of technological equipment on fruit and vegetable cans Enterprises," 1983.

Tara for packing fruits and vegetables - boxes of corrugated cardboard with a strip of parchment paper and cardboard boxes without pads - should be periodically (when entering the enterprise of each new batch and at the request of sanitary supervision) should be exposed microbiological control and meet the following requirements: per 100 sq m. See the amount of mold should not exceed 5, bacteria group E. coli should be absent.

12.28. Oil and oil pumping.

The line of oil packing daily after the end of work is washed with hot water not less than 60 degrees. C with the addition of detergents followed by cold water. Disassembly, careful washing and disinfection of the oil packing line should be carried out at least once a month.

Wooden barrels and metal flasks should be skimmed daily by a sharp steam for 10 to 15

minutes.

Undethought parts of equipment (pipelines, etc.), vats, baths, cans, boilers, containers at least once a day should be washed with warm (40 - 45 °C) water with the addition of detergents and disinfectants authorized by the Ministry of Health of the USSR. Then they should be thoroughly washed with warm water and then rinsed with cold water.

12.29. Dry ice and liquid carbon dioxide production.

Mold, the molds for solid carbon dioxide once a month should be treated with hot steam for 30 minutes and then products clean compressed air.

The walls, the bottom of the mine, as well as containers for storing solid carbon dioxide and trolleys should be periodically, but at least once a month, cleared of snow and ice.

The grinding of blocks of solid carbon dioxide should be carried out in the shop in a designated place, which at the end of the shift should be cleaned of the residue of carbon dioxide and once a month to wash and disinfect.

To work with carbon dioxide, workers must be provided with clean gloves and goggles.

13. DISINSECTION ACTIVITIES AND DERATISATION WORKS

13.1. The Fridge Administration is obliged to ensure that fly, rodent and cockroach activities are carried out throughout the year throughout the premises and throughout the premises.

13.2. To prevent rodents from slitting the floor, holes in ceilings, walls and floors, around mechanical inputs are covered with cement, iron or brick; vents in basements, canals are covered with metal nets, with cells no more than 0.25 x, 0,25 cm and hatches are equipped with tight lids or metal bars.

13.3 In summer, all windows and doorways that open to the street must be protected with nets.

Sticky paper and special electrical traps should be used to exterminate flies.

13.4. In order to disinfect and derate, the refrigerator administration must enter into a contract with gorges stations, occupational units (departments) of sanitary stations, and before and after disinsection work should be thoroughly cleaned all refrigerator.

14. DEMANDS to THE

14.1. For refrigerator workers should be provided a room for rest, heating and drying of clothing.

14.2. Changing rooms and showers for workers of production halls should be equipped in the type of sanitary pads.

14.3. Joint storage of the top, clothing and sanitary garments is not allowed.

14.4. The locker rooms can be open. It is allowed to store outerwear in wardrobe closets, which should be kept clean. In locker rooms and cupboards, storing food is prohibited.

14.5. Walls of dressing sanitary clothes, linen for the issuance of clean clothes, sanitary units, showers, women's hygiene rooms to the height are lined with 2,1 m glazed tiles, above painted with emulsion or other colors.

14.6. All tile-lined panels or painted walls are treated in a wet way as they are contaminated, but at least once a week.

14.7. Household premises must be cleaned thoroughly at the end of work.

14.8. The front room should be equipped with sanitary hangers, hand-washing sinks with hot and cold water, an electric towel or one-time towels, a mirror. Near the sinks should be soap, brushes, device for disinfecting hands. Sinks are recommended to be equipped with a start-up device, diverting a crane, toilets - pedal start, toilets - self-closing doors.

14.9. Toilets and equipment of the women's hygiene room, showers as needed, but at least

once a shift, thoroughly cleaned, washed with water, then disinfected, using disinfectants according to [Appendix 6](#).

14.10. Toilet cleaning equipment should be stored in a designated room, isolated from the cleaning equipment of other premises, to be marked and to have a signal colouring.

15. RULE NEW CARE

15.1. Every employee in the enterprise is responsible for the implementation of personal hygiene rules, for the state of the workplace, for the implementation of technological and sanitary requirements on the site.

ConsultantPlus: Note.

By order of the Ministry of Health and Social Development of the Russian Federation on April 12, 2011 N 302n approved a new [procedure](#) for conducting mandatory preliminary (when applying for work) and periodic medical examinations (examinations) of workers engaged in heavy work and work with harmful and/or dangerous working conditions.

15.2. Applicants and workers on the refrigerator must undergo a medical examination in accordance with the current Instruction of the Ministry of Health of the USSR on mandatory pre-employment and preventive medical Surveys.

15.3. All newly enrolled workers must undergo hygiene training and take an exam with a note in the relevant journal and personal health book. In the future, hygiene training and testing of the knowledge received should be carried out at least once every two years. Persons who have not passed the exam after hygienic training or have not passed a medical examination are not allowed to work.

15.4. Sanitary posts should be set up in food production facilities. On-call officers are appointed from among the working ones. The duty officer checks the hands of those working for the absence of pustular diseases and conducts a survey for the presence of acute intestinal diseases. The results of the inspection are recorded in a special journal "Health" ([Annex 9](#)) in which the date of the inspection, the employee's name, the results of the inspection and the measures taken are put in the journal for the absence of an acute intestinal disease.

15.5. Each worker of the refrigeration plant must be provided with special clothing and sanitary clothing in accordance with the model standards approved by the agencies.

15.6. Changing of the bathroom should take place as pollution, but at least once a shift.

15.7 When visiting the toilet, it is necessary to remove the sled in a designated place. After visiting the toilet wash your hands with soap and disinfect.

15.8. Workers of food production plants should take a shower before starting work, wear clean sanitary clothes, pick up hair under a cap or scarf. It is forbidden to button clothes with pins, needles and to store in pockets of robes cigarettes, pins, money and other foreign objects, to wear beads, earrings, clips, brooches, rings, etc. It is forbidden to leave the production premises in sanitary clothes.

15.9. Dry ice machine staff should have a gas mask, protective goggles, cloth mittens and a telomere.

15.10 When visiting the production facilities, refrigerator support workers are required to:

To follow the rules of personal hygiene;

- tool and spare parts to store in a special closet and carry them in special closed boxes with handles;

- When carrying out work, take measures to prevent foreign objects from entering raw materials, semi-finished products and finished products.

16. RESPONSIBILITY AND CONTROL OF THE THE REAL RULES

16.1. The responsibility for the implementation of these Sanitary Rules rests with the managers of refrigerators.

16.2. Compliance with these sanitary rules is supervised by the departmental veterinary and sanitary services of the refrigerator, as well as by the territorial institutions of the health and epidemiological and veterinary services in the form of state sanitary and veterinary supervision.

16.3. Those responsible for the violation of these Sanitary Rules are brought to administrative responsibility in due course.

With the introduction of these Rules, the "Sanitary Rules for Refrigeration Enterprises" approved by the Deputy Chief Sanitary Physician of the USSR P. Larsky for N 481-64 of July 1964 r13.

Appendix 1

State
Agri-Industrial Committee

Norms
TECHNOLOGICAL DESIGN OF THE BUSINESS
INDUSTRY VTP 532/739-85

4.3. Water, steam and electrical energy consumption standards for technological purposes and water consumption for washing equipment.

MEAT PRODUCTION

The name of the unit is the processing of meat, power, etc., "Measurements"		10 - 30	31 - 60	61 - 90
Technological goals				
Hot water q cube. m/t q	1.32	q 1.16	q 1.09	
Cold water q -" -	1.41	q 1.28	q 1.21	
Equipment wash				
Hot water - -" -	0.85	q 0.31	q 0.77	
Cold water - -" -	0.41	q 0.38	q 0.32	

CANNED FOOD

The name of the Unit is the "Canning" Measurements, power, tuba/cm. "A"			25	50	100
Technological goals					
Hot water, 65 hail. C qcube. m/tube.					
Cold water - -" -	0.7	q 0.68	q 0.66		
Equipment wash					
Hot water, 65 hail. C -- -" -	0.82	q 0.7	q 0.61		
Cold water - -" -	0.31	q 0.25	q 0.22		

THE RULE OF THE WATER IN THE HOUSE OF THE

"Produce-"Special" Water Costs, %			
"Expenditure"			
The "drizzle" of the water, the technolo-in-the-wash on the "every year" on the farm.			
I'm not going to be a cube. m/t's			
It's not a day. Equipment-equipment-in-the-gene-chain-needs			
	нии <*>	вания,	лов ральную туре
Invent.			
"Tara"			
80 and above, 9.0, 30, and 2,38, and 2.			
Less than 80, 10.5, 30, 25, 20, 2			

 Water consumption (%) in irrigation coolers, vacuum pumps, homogenizers and other equipment that uses water as a cooling medium.

Notes. 1. If there is an automatic without-going washing equipment, the specific water consumption is reduced by 20%.

2. In the summer, the specific water consumption increases for ice cream shops with a capacity of 80 tons per day. 30% less than 80 t/day. 40%.

Appendix 2

State progrom of the USSR

Norms TECHNOLOGICAL DESIGN OF DAIRY ENTERPRISES INDUSTRY VTP 645/1347-85

Supplements and changes

The average annual consumption of fresh water and wastewater per t of processed raw material.

Table

Types of Enterprises			
The cube is recycled. m' water, "gate"			
Milk, t in the shift, the cube. m 'loss, '			
The cube. m			
Milk receiving points and "- 2.0"			
Separatory wards			
Urban Dairy (Up to 25)			
Plants and plants (more than 25 - 100 - 6.5 q 5.2 q 1.3			

More than 100 - 200 - 6.0 q 4.8 q 1.2				
More than 200 q 4.5 q 3.6 q 0.9				
Cheese mills up to 25, 6.0				
More than 25 - 100 - 5.5 q 4.7 q 0.8				
More than 100 q 5.0 q 4.3 q 0.7				
Oil mills				
Dry Dairy Plants (Less than 150)				
Products (whole and 150 or more)				
Skimmed milk,				
Milk-canned coms				
Children's products				
"I'm going to have to do this."				
Condensed milk mills - q 90 q 5.5 3.9 q 1.6				
products of more than 90, 5.0, 3.5, 1.5				

Note. The norm does not include the cost of water for the processing of recycled materials (buttermilk, whey, treatment) obtained during the processing of imported raw materials.

Appendix 3

Log
 THE ALL OF THE FREE AND THE FORECAST, BEFORE
 REPAIR WORKS WATER AND SANDING SETY

N	Place	Ha-	Date and	Kem, Kak I	Results	Painting from
P	date	Ractor	It's	Yes, it was	Bakanalyzes	wind
/	and	Hurt	time	Days Lock-	water after	for the plot
P	It's	Waiting	The	disinfecting	Of	and
	time		Denia	water	Disinfection	conductor
	Acciden		Repair	water network	Plumbing	Repair
	t				Network	

Appendix 4

Log
 results of microbiological analyses
 air and walls of the chambers of the workshop

(fridge (refrigeration, base))

'N'

Date	Time (yes)	Tempe	Take a	Namely	View	Cargo status
------	------------	-------	--------	--------	------	--------------

(number, month) Analysis	that, watch) Remedy and Conditions disinfect cameras	Ratura Air In the cameo Re град. C	The Wet %	New We Cargo	For sure, of Contain ers And the fall Forging	At the same time, Laying On the crack Unanie	In the cesse Food (I'
(20)	(40)	(15)	(15) (210)	(40)	(40)	(20)	(20)

Wall analysis				Air analysis						Under-Dated Face произ- Led It's a Analysi s
Common Number mould 1 sq.m. cm Hkhnosity Wall	Quantity moulds on three cups			Evalua tion Ka	Total When Cooperat ion Splash Her settled one per Cup	The amount of splash it settled on 5 cups in 5 minutes.			Evalua tion Ka	
	кля- Befor e- It's a rium	There ' Ni- Di- Mind	Pro- Whose пле- Seni			Treasur e It's a rium	There' It's not a Mind	Pro- Whose пле- Seni		
(25)	(15)	(15)	(20)	(20)	(25)	(15)	(15)	(20)	(20)	(15)

Appendix 5

Certificate of quality n

N P / P	Date You Start	N Steam tii	The first Meno- The Pro- dukta	Guest East MRTU, The Or Mouth	Weigh t No, What' s going on Kg	Tempe Ratura Food on the The servant s Dil- Nick	Organo lepta The company Score	Grade	End The Term Storage Finished Products	The Me Cha- We
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Appendix 6

List MONEY AND DISINFECTING MEANS, PRI SANITARY PROCESSING

"Washing and deregulating"	
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For washing floors, walls and inventa-
The camera is washed 1 -
rooms, toilets, elevators for 1.5 percent oxi-
Products are used to use sodium diphenolate, produce
From the following alkaline solutions: mechanical cleaning and then
Soap-soda; They're working on a whitewashed mixture,
2 per cent calcified , cooked at 2 per cent
Soda; The solution of this drug. At the time,
2 per cent of the drug "Dump"
All surfaces of the irriga
For washing and skimming techno-yut with a solution of chlorine lime with
equipment, containers 0.3 - 0.4% active
Use alkaline solutions: chlorine, produce mechanic-
Soap-soda; Cleaning and after drying
2 per cent calcified
Soda; Blend cooked on the
0.2 per cent caustic co-2 per cent oxife solution
It's a good one. Sodium nolate. In the rest of
the
"0.3 per cent of the drug "Cas-" teas produce sanitary
"s"; Working using solutions de-
composition: 0.15% calcified zinfecctant:
Sodas; "- lightened chlorine solutions
0.075% caustic sodium; Lime with 1% asset content
0.075% metasilicate chlorine; "A
Sodium; 0.07 per cent active
composition: 0.3% metasilicate solution trichloroisocyanin
Sodium; Acid; "A
0.5% calcified - 0.1 percent DHCN solution
Soda
| | |
To skim the inventory and to disinfect the technological
Equipment, containers and invents
The following are used by the "shop" of production halls:
(60 - 70 degrees. C) Alkaline chlorine lime solution with co-
Solutions: "Active Chlorine Holding 150-"
Calcified soda 2%; 200 mg/L; "A
Qb) caustic soda 0.2%; 0.1 per cent di-solution
Sodium metasilicate 0.4%; Sodium chlorisocyanear; "A
Calcified soda 0.6%; 1 per cent chlorine solution
Caustic soda 0.05%; "on the
sodium metasilicate 0.3%; "A".
Calcified soda 0.5%; To disinfect toilets
"Caspost" 0.3% use chlorine solution
500 mg/l of the asset
For washing toilets is appropriate for chlorine.
Use the drug "Pine"
Which is at the same time.
"washing, disinfectant and deso-
It's a doting tool.

Maintaining the quality of products in storage depends to a large extent on the sanitary condition of the refrigeration chambers. One of the causes of microbial damage of products in refrigeration storage are mold fungi. Getting from the walls, from the air on the product and developing on it, molds not only impair the commercial appearance of the product, but also cause its damage under the influence of enzymes released by them. This is especially true for chilled products stored in the cells at a temperature of 5 - -9 hail. C.

The growth of most molds stops or slows down at -4 - -9 degrees. C. However, certain types of mold, such as cladosporium and tamnidiam, can develop at these temperatures, causing reduced quality and spoiling of products.

In cells with a temperature of -12 degrees. C and below mold do not develop, but when the temperature increases, they can also develop in the chamber and on the product.

It is timely to detect the degree of contamination of the chambers with mold and to take appropriate measures will allow microbiological control.

As indicators of microbiological control of the sanitary condition of refrigeration chambers, the contamination of their walls and air with mold is accepted.

Frequency of control for cameras with air temperature -12 degrees. C and below - at least once a quarter, for cameras with an air temperature of -11.9 degrees. C and above - at least 2 times a quarter.

The temperature of the cameras is determined by the actual temperatures according to the "Journal of Temperature Registration and Relative Humidity in the Refrigeration Chambers".

Microbiological studies on mold contamination are also carried out to check the effectiveness of disinfecting refrigeration chambers and at the request of veterinary and sanitary services.

In addition to microbiological methods of determining the contamination of chambers with mold, it is necessary to monitor compliance with sanitary rules and technological instructions.

Note. Samples to determine mold infestation of walls and air are selected at a time when the chamber does not carry out loading and unloading work.

1. Techniques for determining the contamination of refrigeration walls mold chambers

The definition of mold infestation of the walls of refrigeration chambers is carried out by scraping. This method is to determine the number of colonies of molds that grow on the sousse agar or other environment(Annex 7) when sowing scraping from 1 mm the surface layer of whitewashing.

The scraper, sterilized over the flame of the burner, is applied at the level from floor to wall of the chamber vertically so that the 1,5 mblade (scraping part) enteredthe entire depth () into the whitety layer; on the wall in pencil mark the top of the1 mmcutout. 10 cm

The scrapes are taken from the four walls of the chamber, so the sample for analysis is scraping from an area of 100 square pictures. Cm.

The sample is placed in a sterile wide flask with a capacity of 200 - 250 ml, where then poured 100 ml of sterile water. The contents of the flask are thoroughly stirred with a shake for 3 minutes. and then in three sterile petri dishes carry 1 ml of weighing and pour molten and chilled to 42 - 45 degrees. With a condition or other medium.

The crops can last 7 days. at 22 - 24 degrees. C. The first count of grown colonies of mold is made in three days. Colonies of many molds at the beginning of development have a white color, which makes it difficult to determine their species affiliation. Therefore, to determine the species of mold, the ratio of different types of cup with crops are revisited 5 - 7 days after the first viewing, when the colonies of most molds acquire a characteristic for each of them species (the nature of mycelium growth, coloring , the structure of the dispute, etc.).

It should be taken into account that in the first place grow mainly mold of the genus

penicillium. In the development of this mold, conidia (spores) are formed very quickly, which can give rise to new, secondary colonies, which were not present at the initial viewing. Colonies of penicillium, which grew on samosas, are not counted.

The number of colonies of all types of mold, grown on three cups, is summarized and divided into 3, determining the average number of colonies per cup, which corresponds to the number of molds per square meter of the surface of the walls under study.

Colonies of cladosporium and tamnidium, which grew on three cups, sum up. The indicator of mold contamination of the walls of refrigeration chambers is the number of colonies of mold of all kinds per square meter of the surface under study, as well as the total number of colonies of cladosporium and tamnidium on three petri dishes.

2. Techniques for determining air mold contamination of refrigeration chambers

Determining the infestation of mold of the air of the refrigeration chambers is carried out by the method of subsidence of mold spores on petri dishes.

Five sterile cups, pre-melted and chilled to 42 - 45 degrees. With a susnooa, placed on the floor on sterile paper one in each of the four corners and one in the middle of the chamber. In a chamber with sub-zero temperatures, to avoid freezing agar, cups should be placed on wooden bars or pieces of foam. The cups open and the lids, without turning, put next to the cups on sterile paper. The duration of exposure to open cups is 5 minutes.

Mould is cultivated in the same way as when it is determined that walls are contaminated. The number of all types of molds grown on five cups is summed up and divided into 5, determining the average number of colonies per cup, which corresponds to the average number of molds that have settled per cup in 5 minutes. Colonies of cladosporium and tamnidium count on all five cups and summarize.

The average number of mold colonies per petri dish is the indicator of mold contamination of the air of refrigeration chambers, as well as the total number of colonies of cladosporium and tamnidium on five cups.

Note. Filling cups with hot agar is not recommended due to the appearance of abundant condensation on the lids, which when hit by agar can wash off crops and give incorrect results when counting.

3. Determining the type of mold fungi

In refrigeration chambers the following types of mold fungi are most common: penicillium, cladosporium, tamnidium.

Penicillium grows on the agar agar first in the form of white colonies or plaque, which then acquires a greenish-blue color. These molds are characterized by the formation of cystic conidia, at the ends of which are colorless conidia (spores) (Figure 2a - not given).

When the penicillium on meat, sausage and other products grow, they are covered first with white, then bluish-greenish thin, overgrown plaque.

Cladosporium on the agar agar aword is formed by small flat velvety colonies of olive green color, the back of which is black.

Cladosporium has a multicellular, weakly branched mycelium, on the conidia of which are formed bunch-shaped clusters of olive-green oval spores (see pic. 2b - not given). Cladosporium can develop at negative temperatures (up to -9 degrees. C).

On meat, the cladosporium forms dark green and almost black spots that can penetrate deep into muscle tissue. In oil, the cladosporium forms black spots and, in addition, can cause "internal" molding of the oil, developing in the microvoids of the product.

When developed on eggs and cheese, the cladosporium forms dark green or black spots.

Thamnidium refers to flour, head mould. Develops on the substrate in the form of smoky

(gray color) air fluffy plaque. Colorless spores are formed inside the sporangians (heads). Unlike other mucous sporangia tamnidium there are two kinds: large - on the main axis and small (sporangoli) - on the lateral branches (see Figure 2c - not given).

When developing meat, this mold actively breaks down meat proteins and causes the formation of an unpleasant odor. Like the cladosporium, tamnidium can develop at temperatures of up to -9 degrees. C.

Cladosporium and tamnidium are the main agents of meat malformations in refrigeration.

In addition to the above, in the refrigeration chambers there are other molds (alternaria, aspergillus, pink monilia, trihoderma, trichotecum, etc.), which are taken into account when counting the total number of molds.

The results of the assessment of the contamination of the walls and air of the refrigeration chambers with mold are recorded in the journal of the established form (Annex 4).

In cells that have received poor sanitary evaluation on the results of microbiological analysis, disinfection is carried out in accordance with this "Sanitary rules for refrigerators."

Disinfection is considered effective if the amount of mold is 1 sq m. cm of walls and in the air (per cup) is one, and mold slagosporium and tamnidium are absent.

Control and assessment of the contamination of the walls and air of refrigeration chambers with mold are carried out by bacteriologists of the production laboratories of enterprises.

Note. The overall assessment is based on the worst results (e.g. walls are "good", air is "satisfactory" and the overall assessment is "satisfactory").

4. Sanitary assessment of refrigeration chambers by degree infestation of their mold

<p>Walls</p> <p>Total coli-treasure-score</p> <p>cestvo ko- um and dark- ceity ple- um and dark- </p> <p>"Loniy- "dium" on "seni, axial-dium on "</p> <p>"Seni on 1 cup" for one cup</p> <p>It's a square street. See the cup for 5</p> <p>It's a very low-fat, (Wednesday)</p> <p>The average of five</p> <p>ft chaph- chashkam) </p> <p>It's a</p>	
(a) for cameras with a temperature of -12 degrees. C and below	
<p>0 - 20 - 1 at the "Good" - 10 - 10</p> <p>"Total koli"</p> <p>It's not a</p> <p>More than 20</p> <p>21 - 100 - 5 at The Board- 11 - 50 - 1 - 2</p> <p>in general when- works- Works-</p> <p>From 0.</p> <p>Up to 100</p> <p>More than five , More than 50</p> <p>At any time, any</p> <p>"common koli", "common koli"</p> <p>"The Age of THE".</p>	
b) for cameras with a temperature of -11.9 degrees. C and above	
<p>It's a good one.</p> <p>31 - 150 - 5 at "The Board" - 11 - 100 - 2 - 3 at the "Dove"</p>	

	Willwe Sq. M	It's not a Sty Do-ation (to-the- top Before)		Poor concentra tion tration its Skunk	re Bathroom degrown thief, kg	feccia	feccia (result You're a micro Biological Ana Lisa)
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Appendix 9

HEALTH MAGAZINE

N n/p	Date	F.I.O.	Profession	The mark acute intestinal disease In the work- and in his family (signature of works- nick)	Mark Lack of Working pussychnic Diseases	Admission to Work
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List OFFICIAL UNARTICLE ON THE TAKE, READ MORE ON REFRIGERATORS

1. [Instructions](#) on how to control canned goods in manufacturing plants, wholesale bases, retail and catering facilities (1974 г.).
2. Rules of cargo transportation, 1975 г.
3. Inter-industry instruction on determining the capacity of refrigerators, 1978 г.
4. [Rules](#) for transporting goods by road. 1979 г
5. Technological instruction on receiving, refrigerating, storing and producing food on distribution refrigerators of trade, 1983 г.
6. Instructions on sanitary processing of technological equipment at fruit and vegetable canning plants, 1983 г.
7. Instructions on packaging, acceptance, refrigeration, storage and production of cow oil in the dairy and trade industries, 1986 г.
8. In-the-departmental sanitary requirements for meat and dairy refrigerators, 1986 г.
9. Instructions on how to identify and account for the cash production capacity of refrigeration plants and refrigeration vessels in the fishing 1987 rindustry, .
10. Technological instruction on the production of ice cream, 1988 г.
11. Instructions on receiving, refrigerating and storing perishable products in consumer cooperative distribution fridges, 1988 г.
12. Specific water consumption rates in ice cream shops. Rosmyasomoltorg, 29.10.86, N

286 10/649.
