

PROCESS FOR PRODUCING BREAD WITH ADDITION OF CO₂-TOMATO WASTE MEAL



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A perspective direction for rational use of tomato waste is supercritical CO₂ extraction, method whereby the fat-soluble compounds are extracted. Following this process, it is obtained the CO₂ defatted meal, with a high dietary fiber content – 25.1 %, that can be used in the food industry.

The importance of CO₂ meal adding lies in enriching product with dietary fiber, which is the main component, essential to the digestive process: normalizes the beneficial intestinal microflora, improves the functioning of the gastrointestinal tract, and reduces cholesterol in the body



Dried tomato wastes



Grinded tomato wastes



CO₂ meal from tomato wastes



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The invention relates to the food industry, namely to a process for producing bread with addition of CO₂-tomato waste meal. The process, according to the invention, includes mixing high-quality wheat flour with CO₂-tomato waste meal in the amount of 0.5% of the total meal weight, dry or humidified, adding the yeast suspension, the aqueous salt solution, water, kneading the dough for 12...14 min, leavening the dough for 20 min, dividing the dough into pieces with the shaping of semifinished products, additional leavening for 20 min, pre-leavening and scoring the semifinished products, final leavening at 35...40 °C for 20 min and baking thereof at 240 °C.



Manufacture of bread with CO₂ meal from tomato wastes, LLC "Odius"

Bread with CO₂ meal of tomato waste

The bread with 5% CO₂ meal of tomato waste was produced in industrial conditions, at bakery factory "Odius" LLC, Chisinau city, confirmed by the Act of making experimental bread batches.

The use of vegetable non-traditional ingredients (secondary raw materials) in classical recipes contributes to the improvement of organoleptic characteristics, physico-chemical properties and nutritional value of newly created products.

The basic principle of recipes is the fact that the content of dietary fiber in bread products to be at least 15% of the RDA ensured by eating a serving of 200 grams of bread. The consumption of 200 g of bread with 5% CO₂ meal from tomato waste meets to 34.3% from RDA of dietary fiber (6.86 g).

PROCEDEU DE FABRICARE A PÂINII CU ADAOS DE CO₂-ȘROT DIN DEȘURI DE TOMATE

Invenția se referă la industria alimentară, anume la un procedeu de fabricare a pâinii cu adaos de CO₂-șrot din deșuri de tomate. Procedeu include amestecarea făinii de grâu de calitate superioară cu CO₂-șrot din deșuri de tomate în cantitate de 5,0% din masa totală a făinii, în stare uscată sau umidificată, adăugarea suspensiei de drojdie, soluției apoase de sare de bucătărie, apei, frământarea aluatului în decurs de 12...14 min, dospirea acestuia în decurs de 20 min, divizarea aluatului în bucați cu formarea semifabricatelor, dospirea suplimentară în decurs de 20 min, pre dospirea și creșterea semifabricatelor, dospirea finală în decurs de 20 min la temperatura de 35...40°C și coacerea acestora la 240°C.

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