

### Problem № 6 «Pancakes»



#### Team «MG 12»

# The problem:

# Suggest reasonable criterions that will help to evaluate the palatability of pancakes.

# Hypothesis: the palatability of pancakes depends on cooking conditions and ingredients.

# **Objective: determine the factors that affect the palatability of pancakes.**

#### Tasks:

- 1. With a help of social survey, find out the criterions of pancakes' palatability.
- 2. Using information sources, work out properties of various pans.
- 3. Determine the dependence of deliciousness on the amount of ingredients.
- 4. Determine the dependence of palatability on the type of a pan.
- 5. Suggest a recipe of the most delicious pancakes(according to a survey)

# «Normal and healthy food is food eaten with appetite and enjoyment» I. Pavlov

### Parameters of palatability of pancakes:

- 1) Oiliness
- 2) Colour
- 3) Amount of holes
- 4) Thickness
- 5) Taste(sweet, sour, salty, vapid)
- 6) Shape
- 7) diameter (size)
- 8) Consistence

# Questioneer

#### The most delicious pancake

Oiliness	Shape
1.Oily	1.Round (regular)
2.Dry	2.Round (irregular)
Colour	Size (diameter)
1.Light-brown	1.Small
2.Brown	2.Medium
3.Dark brown	3.Big
Holes	Consistence
1.With holes	1.Soft
2.Without holes	2.Crispy
Thickness 1.Thick 2.Thin	Taste 1.Sweet 2.Sour 3.Vapid 4.Salty



# Colour



# Amount of holes



### Thickness



















#### Everything starts with dough

You can make dough using water, milk or kefir as a base.

- •Kefir soft and light
- •Water thin and elastic
- •Milk thin with smooth surface



# Ingredients

- Milk «Зеленый луг»
- Flour «Алтайская»
- Oil «Елея»
- Eggs «Деревенские»



### Palatability can depend on the amount of eggs that were used to make dough \*Without eggs \*1 egg \*2 eggs



The palatability can depend on the amount of water. The more water you use, the more watery the pancakes become and the harder it becomes to lift them ant the more holes appear.

•100 g of water



#### •200 g of water



#### Table. Types of pans

Material and coating	+	-
Steel (Stainless)	Does not interact with acids and alkalis, safe for life, keeps the heat for a long time.	The heat spreads unevenly
Aluminum (no coating)	Stamped – light and cheap	The bottom is easily deformed
	Cast – thick bottom, easily heated and keeps the heat for a long time	Noxious substances are emitted if an oxide coverage is damaged(storage of acid products, mechanical damage)
Teflon coating	Heat-resistant, does not interact with acids and alkalis, non-stick	Emits noxious substances if damaged, must not be heated more then 230 degrees
Titanium coating	Durable, non-stick, safe for life	Expensive
Ceramic coating	More durable then Teflon, non-stick, environmentally friendly, the heat spreads evenly over the entire surface, can be heated up to 400 degrees	Cannot be used with induction cooking

# Cast iron pan





# Cast iron pan







# Aluminum pan







# Pan with Teflon covering







### Pan with ceramic covering



### Pan with ceramic covering



# Steel pan







# Conclusions

- 1) The majority of people prefer light-brown, thin, sweet pancakes.
- 2) The palatability of pancakes depends on the amount of ingredients used.
- 3) You can make more appetizing pancakes using cast iron pan (according to the social survey).
- 4) The recipe of amazing pancakes

# Recipe

- 2 l of milk
- 1,5 teaspoons of salt
- 18-20 teaspoons of sugar
- 8 eggs
- 700 g of flour
- 4 soup spoons of oil



# Sources

- 1. https://ru.wikipedia.org/wiki/Сковорода
- 2. http://eda.ru/desserts/recipe16014/tonkieblini-na-moloke