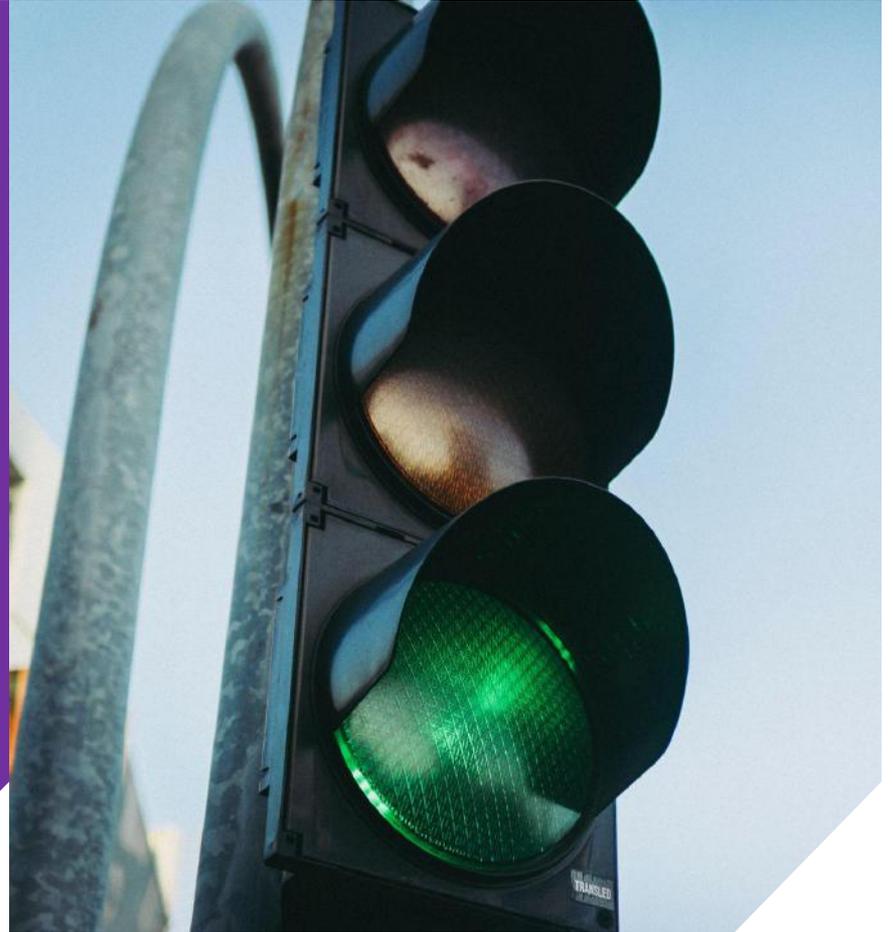


Nutrition in diabetes mellitus

General principles of nutrition in type 1 diabetes.





The general principles of nutrition for children with diabetes are the same as for other children.

Nutrition should be in accordance with the food pyramid

Institute of Food
and Nutrition for Children
and Young People



Spożywanie zalecanych w piramidzie produktów spożywczych w odpowiednich ilościach i proporcjach oraz codzienna aktywność fizyczna i inne elementy stylu życia są kluczem do zdrowia, prawidłowego rozwoju i dobrych wyników w nauce.

Daily energy requirement

Fats

30.0%

Carbohydrates

50.0%

Proteins

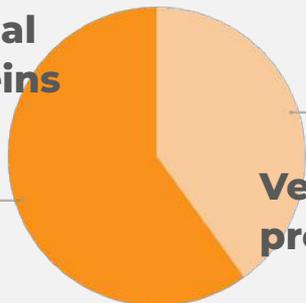
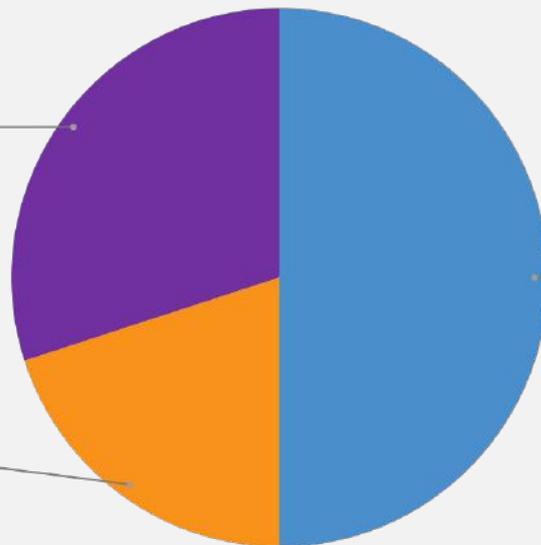
20.0%

**Animal
proteins**

60.0%

**Vegetable
proteins**

40.0%



The amount of carbohydrates should be **controlled and contain**

45-50%

of the daily energy requirement.



Simple sugars may
comprise a **maximum** of

10%

of the daily energy
requirement.





Add some variety!

Every day we should provide our bodies with **about 80 different nutrients** in the right proportions and quantities through our food.



There is no perfect product that provides all of these ingredients, so a **diet** with diabetes mellitus needs to **be varied.**



Remember!



5 meals a day

Remember, eat 5 meals a day, drink water frequently and brush your teeth after eating.



Vegetables and fruit

Eat as many vegetables as possible. Eat no more than 2 portions of fruit per day.



Whole grain products

Of the cereal products, eat the whole grain ones.

Remember!



2 glasses of milk

You can replace them with natural yoghurt, kefir and some cheese.



Good sources of protein

These include lean meat, fish, eggs and pulses.



Fats

Choose vegetable fats over animal fats.

Remember!



Physical activity

Be physically active every day.

Sleep

Get enough sleep so your brain can rest.

Weight

Check your height and weight regularly.

Your main meal:

Cereal products

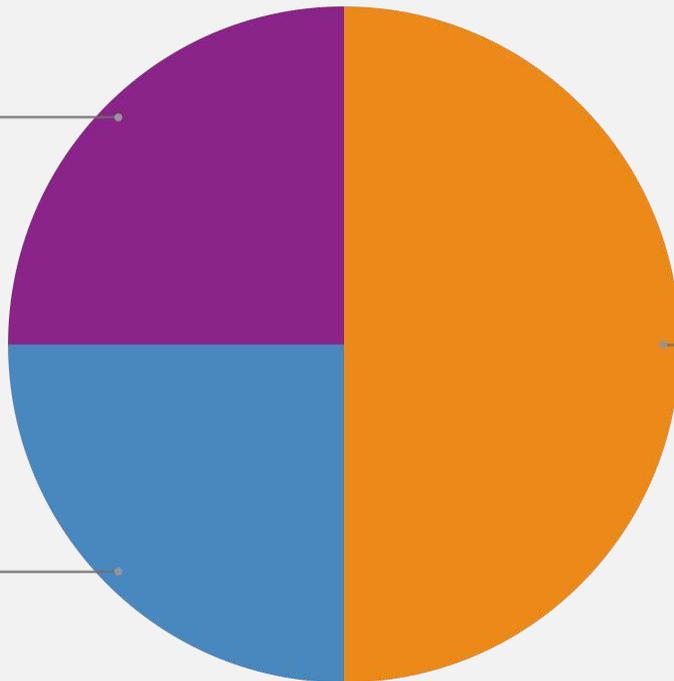
or starchy vegetables
(pasta, groats, potatoes)

25.0%

Proteins

fish, dairy products, eggs,
meat, legumes

25.0%



Vegetables

50.0%



Opt for...

- **whole grain products** such as groats and wholemeal pasta
- **water**
- **poultry, fish, legumes, nuts**
- **vegetables and fruit** of different colours, **natural dairy products**

**instead
of**

- processed cereal products such as **light breads and sugary breakfast cereals**
- **sugary drinks**
- **red meat and meat preparations**
- **processed foods** (fast food, salty snacks, waffles, bars) that are **high in simple sugars, fats and salt**

YES

NO

Do not eat:

processed foods like fast food,
salty snacks, sweets, candy
bars, sugary drinks.



Eat less:
salt, red meat and meat
preparations.

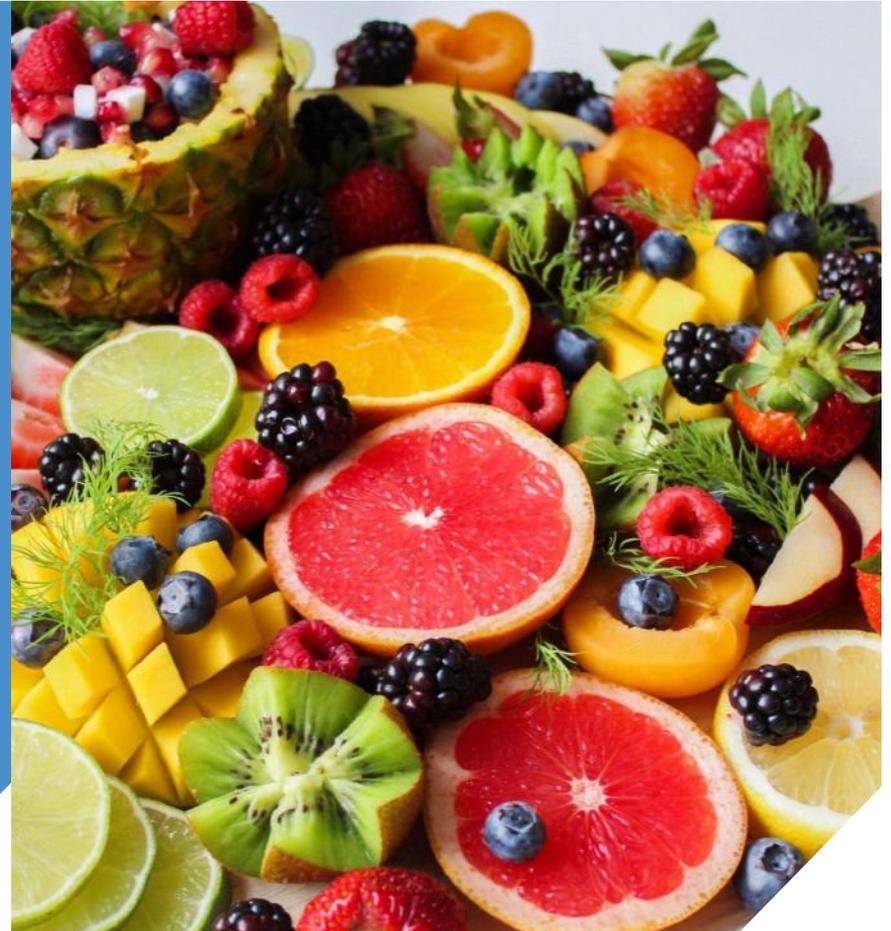


Nutrients



To make a delicious cocktail, we need to add the right ingredients.

To **build our bodies**, we also need **the right ingredients**.



Main nutrients



Proteins



Carbohydrates



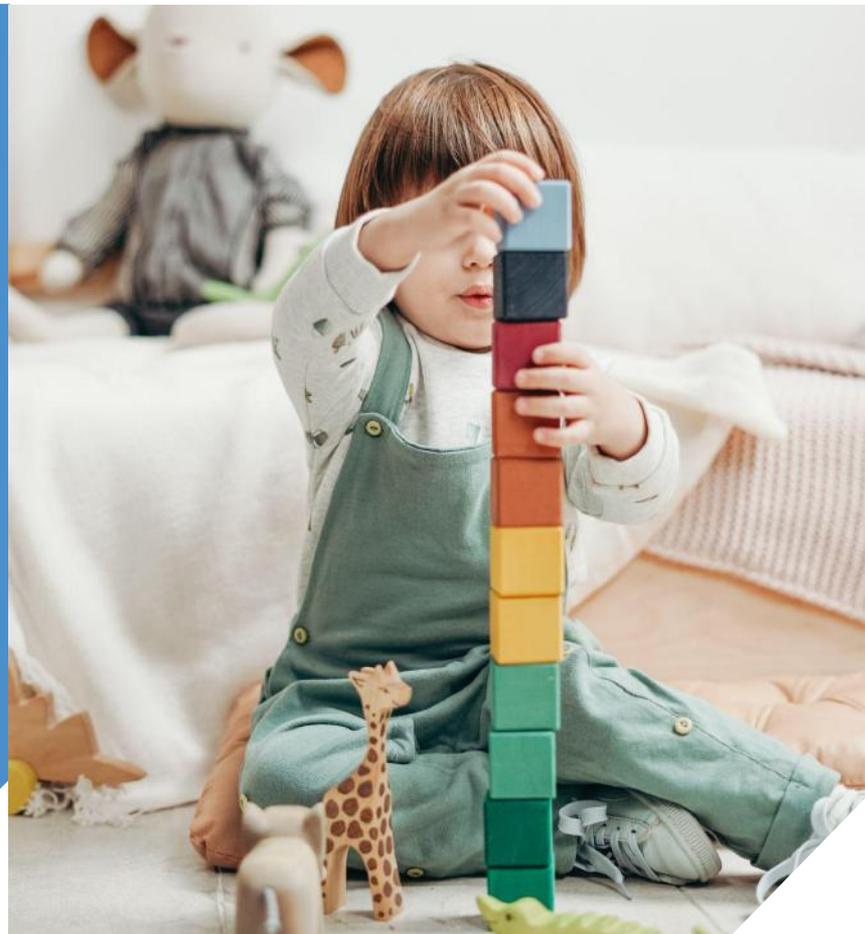
Fats

Proteins

They build your body.

They are found in our muscles, blood and organs, for example.

They are essential for each of us to grow and be strong.





Animal proteins

**should make up 60%
of the protein:**

- eggs,
- meat and sandwich meats,
- fish,
- milk and milk products



Vegetable proteins

**are more difficult
to digest:**

- cereal products,
- pulses,
- vegetables,
- fruit,



**Daily energy
requirement for
protein:**

15-20%

60% of which should be
of animal origin.

Fats

They provide energy.

They transport vitamins in the body. They build, among other things, the nervous system, cell membranes (clothes for cells).





Mono- and polyunsaturated fats

Good fats:

- nuts,
- seeds: e.g. sunflower, pumpkin, sesame, flax,
- oils from these seeds, rapeseed oil,
- olive oil,
- avocado,
- fish: e.g. salmon, herring, trout.



Saturated fats

Cut down on:

- fatty meats and sandwich meats,
- pâtés,
- fatty milk,
- fatty cheeses.

Carbohydrates

They are the main **source of energy** for the body.





Simple carbohydrates

Small particles that are immediately absorbed into the blood.

These include, for example: sugar, honey, sweets, confectionery.

AVOID!



Complex carbohydrates

Larger particles that need to be cut into small pieces by the digestive tract before they can be absorbed.

These include, for example: groats, whole grain bread, whole grain cereals, rice, pasta

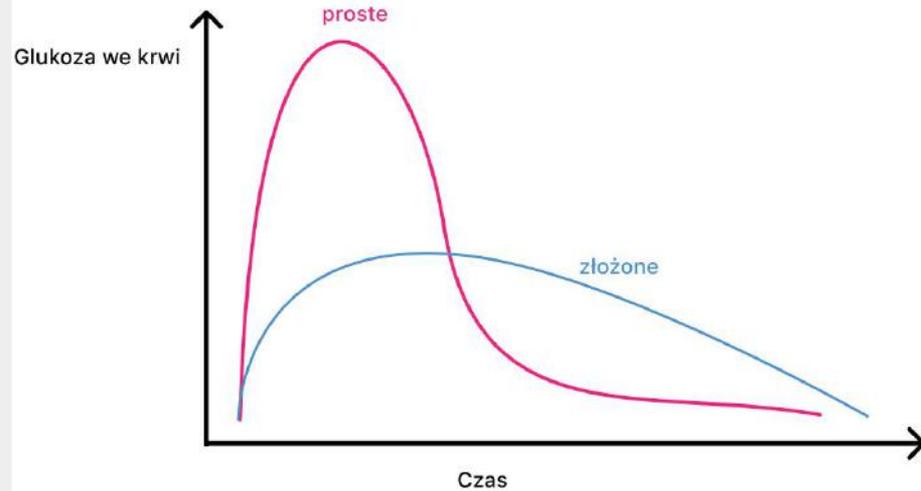
Simple carbohydrates

Blood glucose levels **rise and fall quickly**

Risk of hypoglycaemia.

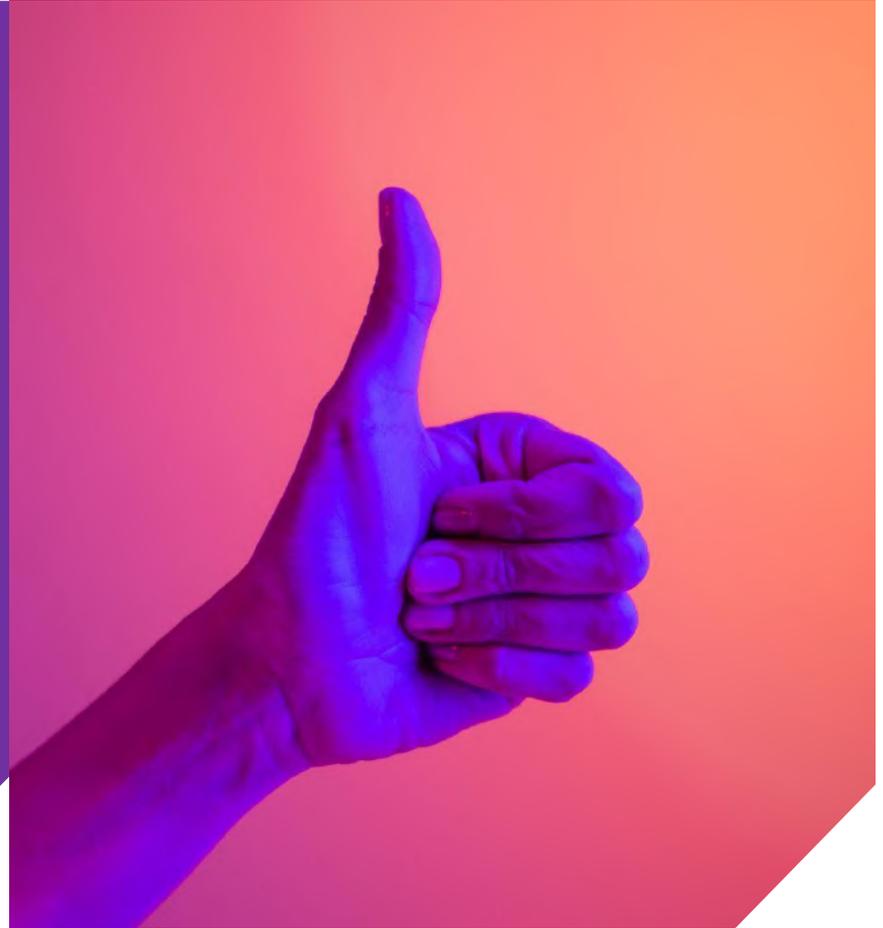
Complex carbohydrates

Blood glucose levels rise **more slowly and fall more slowly.**



Dietary fibre

- It is a **complex carbohydrate**.
- It is unique - **it is not digested**.
- **It helps** the intestines to move.
- It is **food for the good bacteria** living in the intestines, which **support** their work.



Carbohydrate exchanges



What are CEs?

1 CE - carbohydrate exchange

it is:

a portion of the product expressed
in grams which contains

10 grams of available carbohydrate
(excluding fibre).



Why use them?

**Counting CEs helps
with menu planning.**

With CEs you can choose the portion sizes of any given meal and keep the amount of carbohydrates you eat consistent.



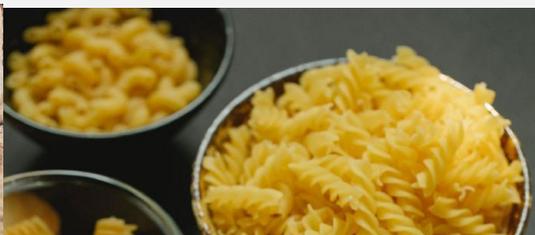
1 CE is...



65 grams of potatoes



25 grams of wholemeal bread



45 grams of cooked pasta



190 grams of raspberries



140 grams of apple



205 ml of milk

How to count CEs?

Rice in 100 g contains **76.9 g of carbohydrates.**

We then calculate the number of carbohydrate exchanges:

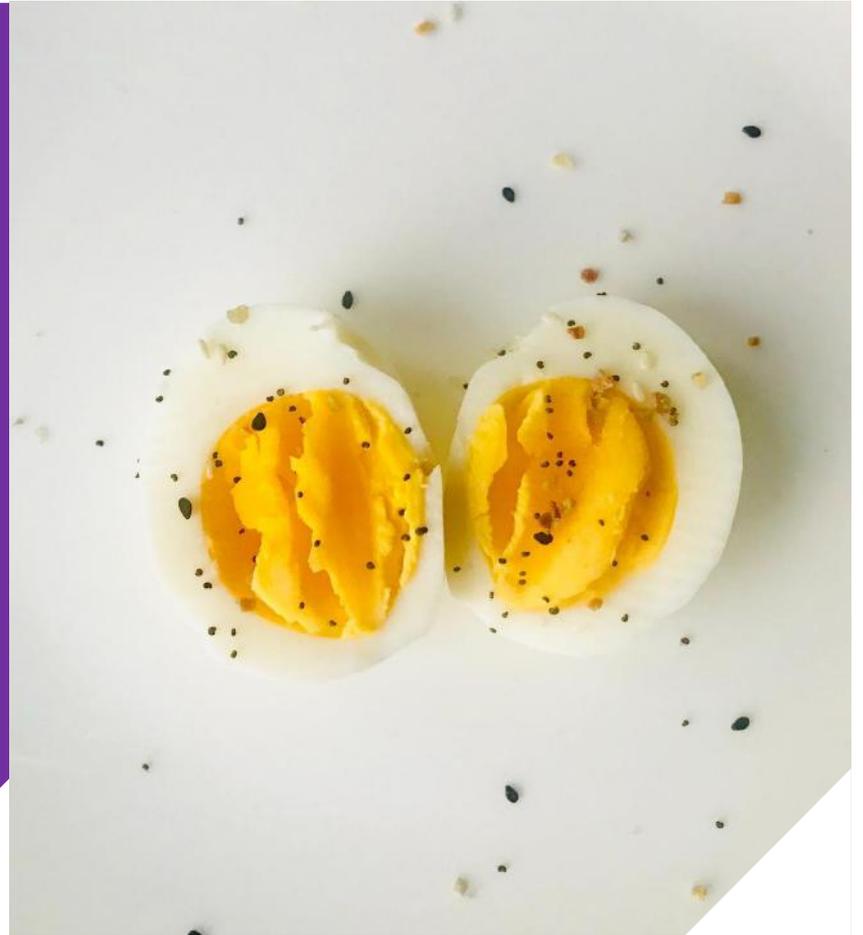
1 CE - **10 g** digestible carbohydrates

$$(\mathbf{76.9\ g} \times 1\ \text{CE}) / \mathbf{10\ g} = 7.69\ \text{CE} \sim 7.7\ \text{CE}$$

that is, 100 g of rice contains **7.7 CE.**

Nazwa produktu	Ilość gramów = 1 WW	Wielkość porcji w przybliżeniu
Pieczywo		
Bułka pszenna zwykła	20	1/3 bułki o wadze 60 g
Bułka wrodawska	20	1/3 bułki o wadze 60 g
Bagietka francuska	20	kawałek o wymiarach 5x4,5x6 cm
Kajzerka	20	1/2 bułki o wadze 40 g
Bułka grahamka	20	1/5 bułki o wadze 100 g
Chleb pszenny	20	Kromka o wymiarach 8x11x0,5 cm
Chleb graham	25	Kromka o wymiarach 9,5x10x1 cm
Chleb chrupki	15	1 i 1/2 kromki o wymiarach 12x6 cm
Pieczywo tostowe	20	Kromka o wymiarach 8x9x1 cm
Pieczywo tostowe graham	20	Kromka o wymiarach 9x6,5x1 cm
Paluszki	15	10 sztuk o dł.12 cm
Chleb żytni jasny	20	Kromka o wymiarach 10x7x1 cm
Chleb żytni razowy	25	Kromka o wymiarach 9,5x7x1 cm
Chleb Pumpernikiel	20	1/2 kromki
Sucharki bezcukrowe	15	1 i 1/2 sucharka o wymiarach 8,5x6x1 cm
Maca	12	1 kromka o wymiarach 10x10 cm
Bułka tarta	15	1 i 1/2 łyżki stołowej

Protein and fat exchanges



What are protein and fat exchanges?

1 PFE - protein and fat exchange
is **100 calories** from protein and fat

1 gram of protein = 4 kcal

1 gram of fat = 9 kcal

How to count PFEs?

1.

Check the composition of the product (e.g. table on the packaging).

2.

Calculate the number of calories from protein (number of grams x 4).

3.

Calculate the number of calories from fat (number of grams x 9).

4.

Add your results.

5.

Divide the result by 100 (1 PFE = 100 kcal).

6.

Result = number of PFEs

Examples

1. Multiply the amount of protein x 4 kcal

Protein = 17 g x 4 kcal = 68 kcal

2. Multiply the amount of fat x 9 kcal

Fat = 32 g x 9 kcal = 288 kcal

3. Add the results up

68 kcal + 288 kcal = 356 kcal

4. Divide the result by 100 (1 PFE = 100 kcal)

356 kcal : 100 = 3.5 WBT

Wartość odżywcza produktu	w 100 g	w porcji 30 g	% RWS*
Wartość energetyczna	1476 kJ 357 kcal	443 kJ 107 kcal	5 %
Tłuszcz	32 g	9,6 g	14 %
w tym kwasy tłuszczowe nasycone	20 g	6,1 g	31 %
Węglowodany	< 0,5 g	< 0,5 g	0 %
w tym cukry	< 0,5 g	< 0,5 g	0 %
Błonnik	0 g	0 g	
Białko	17 g	5,1 g	10 %
Sól	1,7 g	0,51 g	9 %

Examples

1. Multiply the amount of protein x 4 kcal

Protein = 10 g x 4 kcal = 40 kcal

2. Multiply the amount of fat x 9 kcal

Fat = 44 g x 9 kcal = 396 kcal

3. Add the results up

40 kcal + 396 kcal = 436 kcal

4. Divide the result by 100 (1 PFE = 100 kcal)

436 kcal : 100 = 4 WBT



Wartość odżywcza w 100 g:	
wartość energetyczna	2258 kJ (546 kcal)
tłuszcz	44 g
w tym kwasy tłuszczowe nasycone	27 g
węglowodany	19 g
w tym cukry	16 g
białko	10 g
sól	0 g

Examples

1. Multiply the amount of protein x 4 kcal

Protein = 13 g x 4 kcal = 52 kcal

2. Multiply the amount of fat x 9 kcal

Fat = 36 g x 9 kcal = 324 kcal

3. Add the results up

52 kcal + 324 kcal = 377 kcal

4. Divide the result by 100 (1 PFE = 100 kcal)

377 kcal : 100 = 4 WBT

Wartość odżywcza produktu:			
	w 100 g produktu	w porcji 50 g produktu	% RWS* w porcji 50 g produktu
Wartość energetyczna	2102 kJ/506 kcal	1051 kJ/253 kcal	13%
Tłuszcz	36 g	18 g	26%
w tym kwasy tłuszczowe nasycone	4,5 g	2,2 g	11%
Węglowodany	29 g	15 g	6%
w tym cukry	24 g	12 g	13%
Błonnik	7,7 g	3,8 g	-
Białko	13 g	6,6 g	13%
Sól	0,04 g	0,02 g	0%
Składniki mineralne			
	w 100 g produktu	w porcji 50 g produktu	% DRWS** w porcji 50 g produktu
Magnez	168 mg (45%*)	84 mg	22%

Types of boluses in pump therapy



Pump therapy

There are three types of boluses in **an insulin pump**:

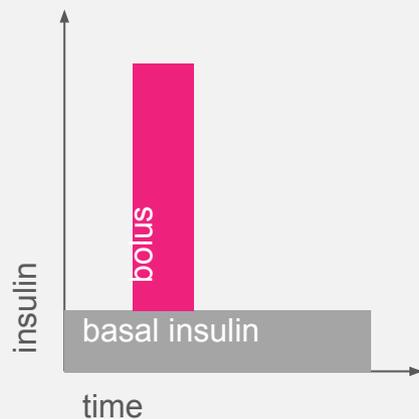
**normal
bolus**

square bolus

dual bolus

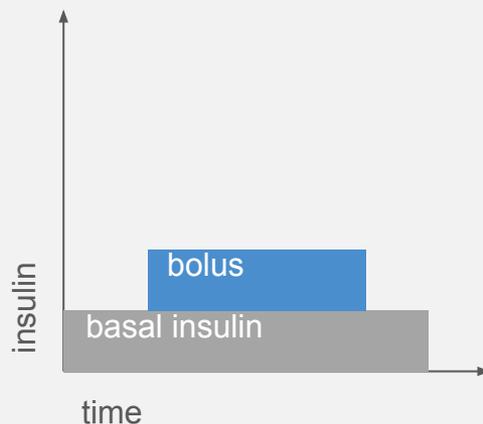
Types of boluses

normal bolus



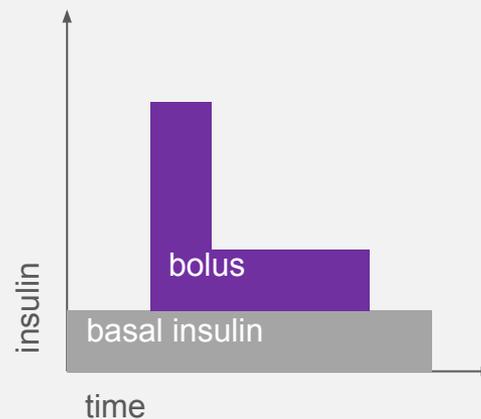
Rapid, one-time administration of a dose of insulin.

square bolus



Slow, steady delivery of insulin doses spaced out over a period of time.

dual bolus



It consists of a **normal bolus** and a **square bolus**, which are administered in freely selectable proportions.

Bolus

normal bolus

use:

- with meals that **only** contain **carbohydrates (CE)**
e.g.: fruit, bread, cereals, rice, etc.;
- for adjustment - when the sugar measurement indicates **too high a glucose level.**

square bolus

use:

- with meals that contain **proteins and fats (PFE)**
e.g.: cheese, cottage cheese, meat, sausage, egg, etc.

dual bolus

use:

- with meals that contain **carbohydrates (CE), proteins and fats (PFE)**,
e.g. pizza, fast food, breaded pork chops.

Type of bolus depending on the meal consumed

Bolus prosty WW	Bolus złożony WW+WBT	Bolus przedłużony WBT
Pieczyno	Ciasta	Masło, oleje, smalec, oliwa
Ryż	Wyroby czekoladowe	Majonez, śmietana
Ziemniaki	Fast food	Mięso wieprzowe
Makarony	Placki ziemniaczane, naleśniki	Mięso wołowe
Kasza	Pierogi	Cielęcina
Dżemy	Kotlety panierowane	Wędliny
Warzywa	Owoce z bitą śmietaną	Parówki
Owoce	Tosty	Sery białe tłuste i półtłuste
Soki	Produkty mączne	Sery żółte
Mleko odtłuszczone	Orzechy włoskie, laskowe	Jajka



Converting a product to a specific weight



Let's convert

100 g of the product contains:

- 2 CEs
- 3 PFEs

The product has a weight of **90 g**

2 CEs x **90%** = 1.8 CE normal bolus

3 PFEs x **90%** = 2.7 PFEs square bolus

100 g of the product contains:

- 2 CEs
- 3 PFEs

The product has a weight of **130 g**

2 CEs x **130%** = 2.6 CEs normal bolus

3 PFEs x **130%** = 3.9 PFEs square bolus

Calculation of time per PFE



Let's convert

To calculate the time for which an extended bolus needs to be administered,
add **2** to the amount of PFEs

For example

A meal contains 2 PFEs → **2 PFEs + 2 = 4h**

Thus, set 2 PFEs for 4 hours

Glycaemic index and load

- It ranks foods according to their **effect on increasing blood glucose**.
- It shows how quickly and how much your blood glucose levels will rise after eating a particular food.

Glycemic index

Low Glycemic Index (55 or less) Choose Most Often	Medium Glycemic Index (56 to 69) Choose Less Often	High Glycemic Index (70 or more) Choose Least Often
<ul style="list-style-type: none">AppleApricot (Fresh, Dried)Banana (Green, Unripe)CherriesCantaloupeGrapefruitHoneydew MelonKiwiOrangePeachPearPlumPomegranate	<ul style="list-style-type: none">Banana (Ripe, Yellow)Cherries (Bottled)Cherries (Fresh)Cranberries (Dried)Figs (Fresh, Dried)GrapesKiwiLycheePineappleRaisins	<ul style="list-style-type: none">Banana (Brown, Overripe)Watermelon 

Glycaemic index and load



recommended

Products with a low glycaemic index – below 55

The amount of glucose in the blood increases slowly and slightly.



limit

Products with an average glycaemic index – 55 to 70

The amount of glucose in the blood rises faster and stronger.



eliminate

Products with a high glycaemic index – over 70

The amount of glucose in the blood rises quickly and strongly.

NISKI <55**ŚREDNI 55-70****WYSOKI >70**

most fruit and vegetables

**agrest****borówki****jabłka****maliny****brzoskwinie****porzeczki****pomarańcza****kiwi****brokuły****cukinia****ciecierzyca****pomidor****kapusta****kalafior****kasza
gryczana****czekolada
gorzka****chleb żytni****musli tradycyjne****płatki owsiane****ryż długoziarnisty****ananas****banan****mango****bób****buraki****kukurydza****wafle ryżowe****piwo****kasza manna****daktyle****kasza kukurydziana****glukoza****arbuz****bułka pszenna****marchew
gotowana****słodkie płatki
śniadaniowe****maka pszenna****dynia****chleb biały****chipsy**

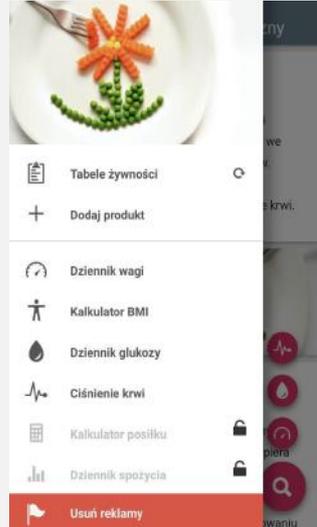
Postprandial glycaemic profile



“My GI” Application

It helps you quickly find the product and read its **Glycemic Index**.

The application is **free of charge**.



What affects the glycaemic index value?



Reducing GI:

- **Presence of proteins and fats**
- **Less ripe fruit**, e.g. a banana with a green peel has a lower GI than a ripe one



Increasing GI:

- **Cooking, heat treatment** - the more overcooked the product, the higher the GI
- **Fragmentation** - the more fragmented the higher the GI
- **Ripening of fruit and vegetables** - the more ripe the higher the GI

Low-GI diet



Eat plenty:

- vegetables
- whole grain products
- legumes



Eat little:

- light bread
- light pasta and white rice
- sweets

Glycaemic load

It shows **how quickly and how much glucose levels will rise** after eating a particular product, as does the GI.

It is more accurate than GI

because it takes into account not only the type of carbohydrate and the rate of absorption, but also the amount of carbohydrates contained in a serving of the product.

As with the glycemic index, we distinguish between **foods with a glycaemic load:**

- **low** < 10
- **average** = 10-20
- **high** > 20

Calculation of the glycaemic load

$$GL = C \times GI : 100$$

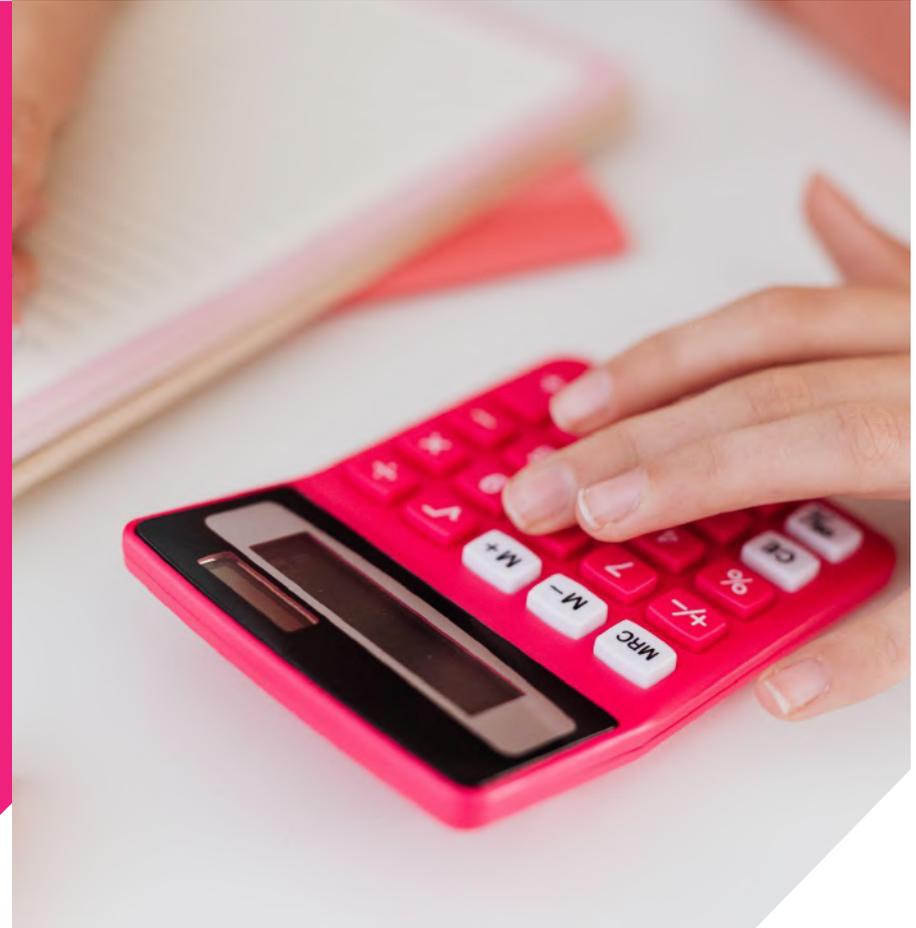
GL - Glycaemic Load

C - grams of digestible carbohydrates per serving

GI - Glycaemic Index



Methods for calculating
carbohydrate exchanges
from ready-made products.



FORMULA

If we want to count how much product we need to weigh for 1 CE, we use a simple formula:

Formula for 1 CE from a large pack

1CE = 1000 : amount of carbohydrates per 100 grams

Example

1000 : 68 = 14.7 grams

1CE = 15 grams of product

Výživové údaje / Prosječne hranjive vrijednosti / Informacija o wartości odżywczej / Declarație nutrițională / Výživové údaje / Хранителна стойност	Na / Na / W / Per / Na / за 100 g
Energetická hodnota / Energija / Wartość energetyczna / Valoare energetică / Energia / Энергийна стойност	1829 kJ / 435 kcal
Tuky / Masti / Tłuszcz / Grāsimi / Туку / Мазнини	14 g
z toho nasycené mastné kyseliny / od kojih zasićene masne kiseline / w tym kwasy tłuszczowe nasycone / din care acizi grași saturați / z toho nasýtené mastné kyseliny / от които наситени мастни киселини	6,3 g
Sacharidy / Ugljikohidrati / Węglowodany / Glucide / Sacharidy / Въглехидрати	68 g
z toho cukry / od kojih šećeri / w tym cukry / din care zaharuri / z toho cukry / от които захари	24 g
Vláknina / Vlakna / Włonnik / Fibre / Vlákna / Влакнини	3,6 g
Bílkoviny / Bjełanćevine / Białko / Proteine / Bielkoviny / Белтъци	7,4 g
Sůl / Sol / Sól / Sare / Sol / Сол	0,56 g

Example

1000 : 23 = 44.5 grams

ICE = 45 grams of product

Wartość odżywcza w 100 g produktu po ugotowaniu	%RWS* w 100 g	w 1 porcji (ok. 200 g)	%RWS* w porcji
Energia 636 kJ/ 150 kcal	8%	1272 kJ/ 301 kcal	15%
Tłuszcz 0,8 g	1%	1,6 g	2%
w tym kwasy nasycone 0,2 g	1%	0,4 g	2%
Węglowodany 23 g	9%	47 g	18%
w tym cukry 1,3 g	1%	2,6 g	3%
Błonnik 3,7 g	-	7,4 g	-
Białko 11 g	21%	21 g	42%
Sól <0,01 g	<1%	<0,01 g	<1%
Żelazo (Fe) 2,72 mg	19%	5,44 mg	39%
Miedź (Cu) 0,36 mg	36%	0,72 mg	72%
Mangan (Mn) 0,56 mg	28%	1,12 mg	56%

Example

1000 : 65 = 15.4 grams

ICE = 15 grams of product

Wartość odżywcza/ Nutrition information/ Nutriční hodnota/ Nutricne informacie/ Información nutrimental	/ 100 g
Wartość energetyczna/Energy/Energetická hodnota/Energia/Valor energético	2060 kJ/ 492 kcal
Tłuszcz/Fat/Tuky/Tuky/Grasas	23 g
- w tym kwasy tłuszczowe nasycone/of which saturates/z toho nasycené masné kyseliny/z toho nasycené masné kyseliny/de las cuales saturadas	11 g
Węglowodany/Carbohydrate/Sacharidy/Sacharidy/Hidratos de carbono	65 g
- w tym cukry/of which sugars/z toho cukry/z toho cukry/de los cuales azúcares	38 g
Błonnik/Fiber/Vláknina/Vláknina/Fibra	4 g
Białko/Protein/Bilkoviny/Bielkoviny/Proteínas	5,5 g
Sól/Salt/Sůl/Sol/Sal	0,285 g

FORMULA

If we want to count how many CEs are in the whole package we use the formula:

Formula for the number of CEs in the whole package:

Number of CEs = Amount of carbohydrates per 100 grams x product weight : 1000

Example

$$5.3 \text{ g} \times 350 \text{ g} : 1000 = 1.8 \text{ CE}$$

The package contains 1.8 CE



Example of a menu for a child with diabetes treated with pen therapy



Notes for guidance

1.

With pen therapy, we focus most on **counting carbohydrate exchanges (CEs)**.

2.

The pink colour indicates the carbohydrate products which need to be precisely weighed according to the carbohydrate exchange table or by calculating from the above-mentioned formulas.

Breakfast 1 - 3 CEs

Oatmeal with milk:

- **2% milk - 1 CE = 205 ml**
- **oat flakes - 2 CEs = 30 g**
- nuts

Breakfast 2 - 2 CEs

Orange - 1 CE = 110 g

Graham roll with cheese:

- **graham roll - 1 CE = 20 g**
- butter
- cheese
- vegetables (tomato, cucumber)

Dinner - 4 CEs

Tomato soup with pasta

- **cooked pasta**
1 CE = 45 g
- Do not count the stock as long as you do not thicken the soup with flour.

Main course - roast chicken (one serving)

- **potatoes 3 CEs = 195 g**
(3 CEs x 65 g)
- cucumber salad with 12% cream
(no sugar)

Tea - 2 CEs

Strawberries - 1 CE = 170 g

Salty sticks - 1 CE = 15 g

Supper 1 - 3 CEs

1 - 3 CEs

Scrambled eggs with bread and vegetables

- 2 eggs
- ghee
- seasoning
- **Wholemeal rye bread - 3 CEs = 75g**
- vegetables (pepper, radish)
- unsweetened tea

2 - 2 CEs

Sandwich

- **light rye bread - 2 CEs = 40g**
- butter
- lean sandwich meat
- cucumber, lettuce

Apps that help you count CEs and FBEs



Fitatu

Wczoraj Sroda **fitatu** Dzisiaj Jutro Piątek

Nowość w Fitatu ✕
Połączenie z aplikacją Strava

B T WW WBT

Śniadanie ^

496 kcal 15.4 g 7.8 g 8.7 1.3 +

Korzenny pudding ryżowy z jabłkiem i rodzynkami ✕
1 × porcja (582 g)
496 kcal 15.4 g 7.8 g 8.7 1.3

II śniadanie

0 kcal 0 g 0 g 0 0 +

Obiad

0 kcal 0 g 0 g 0 0 +

Kalorie **496** / 1597 kcal Białka **15.4** / 48 - 80 g Tł. **7.8** / 44 - 53 g Wegl. **96.1** / 180 - 279 g

Jadłospis Przepisy Zakupy Więcej

II Śniadanie Dzisiaj

Castello Chleb żytni ze słonecznikiem 450 g (Castello) 

1× kromka 90 g 206 kcal >

100 g 100 g 229 kcal >

2× kromka 180 g 412 kcal >

3× kromka 270 g 618 kcal >

kromka 0 kcal >

Składniki

Kalorie **702** / 1597 kcal Białka **21.1** / 48 - 80 g Tł. **13.2** / 44 - 53 g Wegl. **125.8** / 180 - 279 g

II Śniadanie Dzisiaj

Magnez (mg) b.d.

Miedź (mg) b.d.

Potas (mg) b.d.

Selen (µg) b.d.

Sód (mg) b.d.

Wapń (mg) b.d.

Żelazo (mg) b.d.

Pozostałe

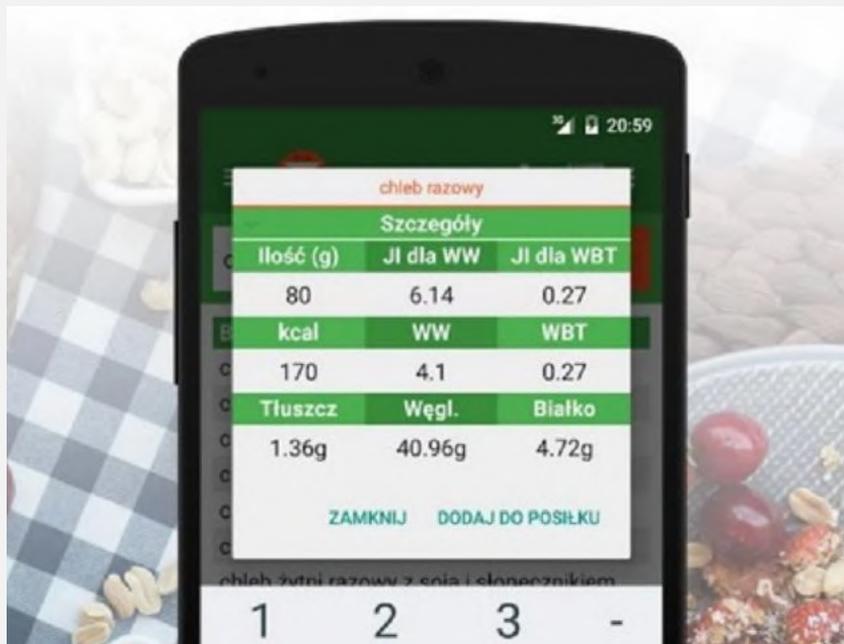
Wymienniki węglowodanowe (WW) 2.39*

Wymienniki białkowo-tłuszczowe (WBT) 0.79

* Opiera się o dane, które posiadamy (np. które dostarczył producent).

Kalorie **702** / 1597 kcal Białka **21.1** / 48 - 80 g Tł. **13.2** / 44 - 53 g Wegl. **125.8** / 180 - 279 g

VitaScale



FBE calculator



Exchange calculator by Medtronic

The screenshot shows the Medtronic Exchange calculator app interface. At the top, the status bar displays signal strength, Wi-Fi, 63% battery, and the time 15:02. The app header features the Medtronic logo and the title 'Potrawy' with a star icon. The main content area is titled 'Buraki z jabłkami' and includes a disclaimer: 'Wartości odżywcze dotyczą gotowej potrawy, przepis pochodzi z Instytutu Żywności. Nie można edytować składników.' Below this, the 'Waga gotowej potrawy:' is set to '100 g'. A table displays nutritional values and ingredients. The table has two tabs: 'Wartości odżywcze' (selected) and 'Składniki'. The data is as follows:

Wartości odżywcze		Składniki
WW	WW	0,8
WBT	WBT	0,4
WM	Suma wymienników	1,2
WBT%	Procent WBT w sumie	29%
Kcal	Kcal	70 kcal
B	Białko	1,5 g
W	Węglowodany	10,3 g
T	Tłuszcz	3,3 g 30 kcal
Bł	Błonnik	1,8 g

At the bottom, there is a navigation bar with icons for 'Posiłki', 'Potrawy', 'Produkty', and 'Medtronic'. The system navigation bar at the very bottom shows back, home, and app drawer icons.



Garść winogron zielonych waży 70g.

	100g	na zdjęciu (70 g)
Energia	71 kcal	50 kcal
Białko	0,5 g	0,4 g
Tłuszcz	0,2 g	0,1 g
Kwasy tłuszczowe nasycone	0,1 g	0,0 g
Węglowodany	16,1 g	11,3 g
Błonnik	1,5 g	1,1 g
Sól	0,0 g	0,0 g

Dzienne
zapotrzebowanie ?
Porcja ze zdjęcia dla 2000

**Thank you
for your attention**

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