

Through the day with energy

Estimate your energy demand
Cover it competently

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Reminder!

What happens when diet and fluid intake are not adequate?

- low energy levels
- reduced ability to regenerate
- headaches
- reduced ability to concentrate
- bad mood
- slightly sickly
- weight fluctuations
- problems with skin, hair, bones, or digestion
- injuries



Nutrition – components

Energy-supplying components

- carbohydrates
- fats
- protein
- alcohol

Other ingredients

- Vitamins, minerals, trace minerals, dietary fibres, secondary plant substances, water, aroma and flavourings



What provides how many kcal?

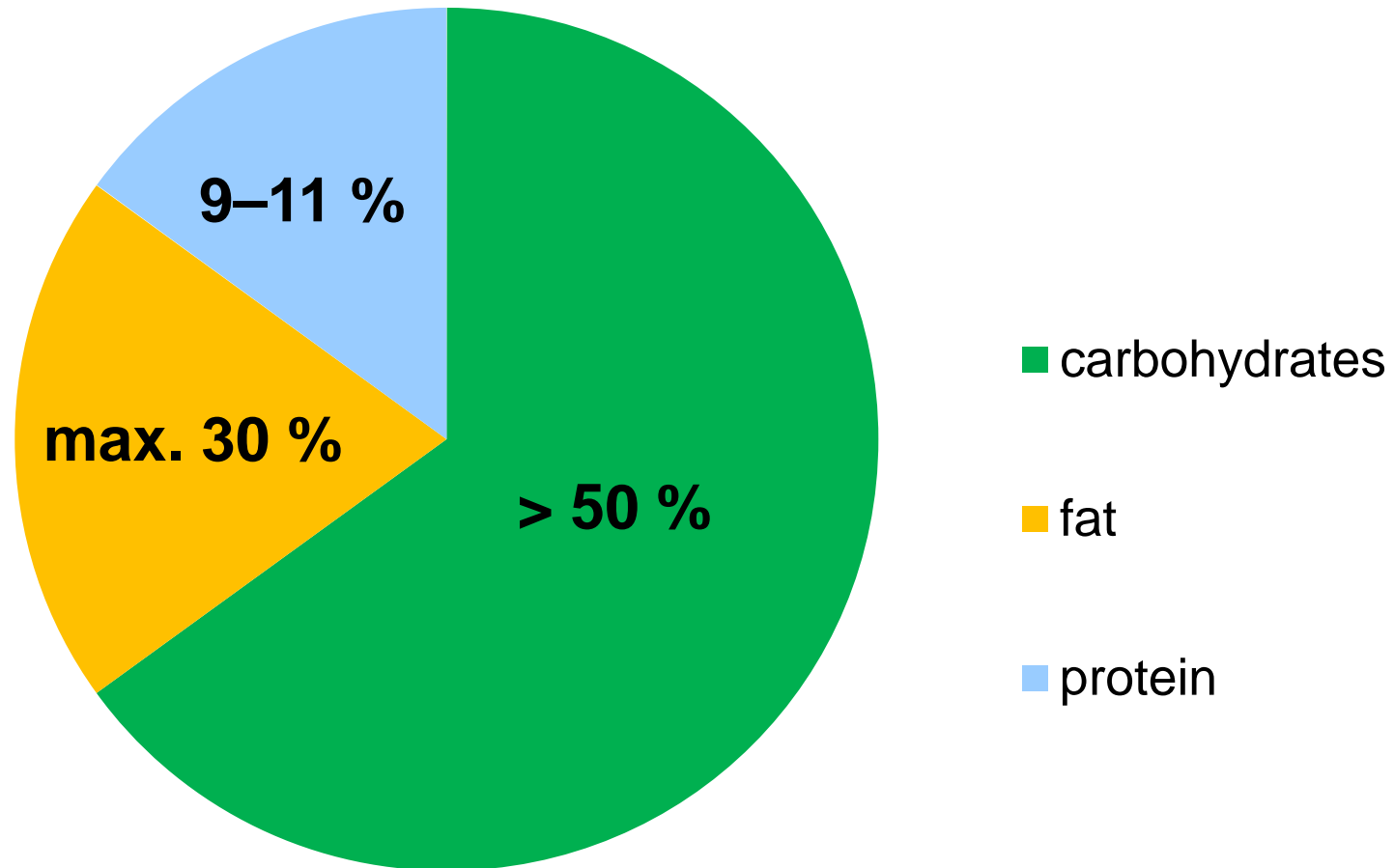
Energy = “calorific value” = kcal

1g carbohydrates	4.2 kcal
1g proteins	4.2 kcal
1g fat	9.2 kcal
1g alcohol	7.0 kcal
	(“empty calories”)

Aim:

Balance between energy intake and energy consumption to maintain performance potential and weight.

Percentage distribution of nutrients



Energy demand

Basal metabolic rate (BMR)

= Energy quantity for vegetative body systems (lungs, heart, digestive tract, brain, etc.)

= Body weight (kg) x 24 x 1 kcal l



Activity metabolic rate

= Human energy consumption for all measurable activities (growth, physical work, etc.)



Total energy expenditure (daily energy demand) (TEE)

$$\text{TEE} = \text{BMR} \times \text{PAL}$$

(PAL = Physical activity level)

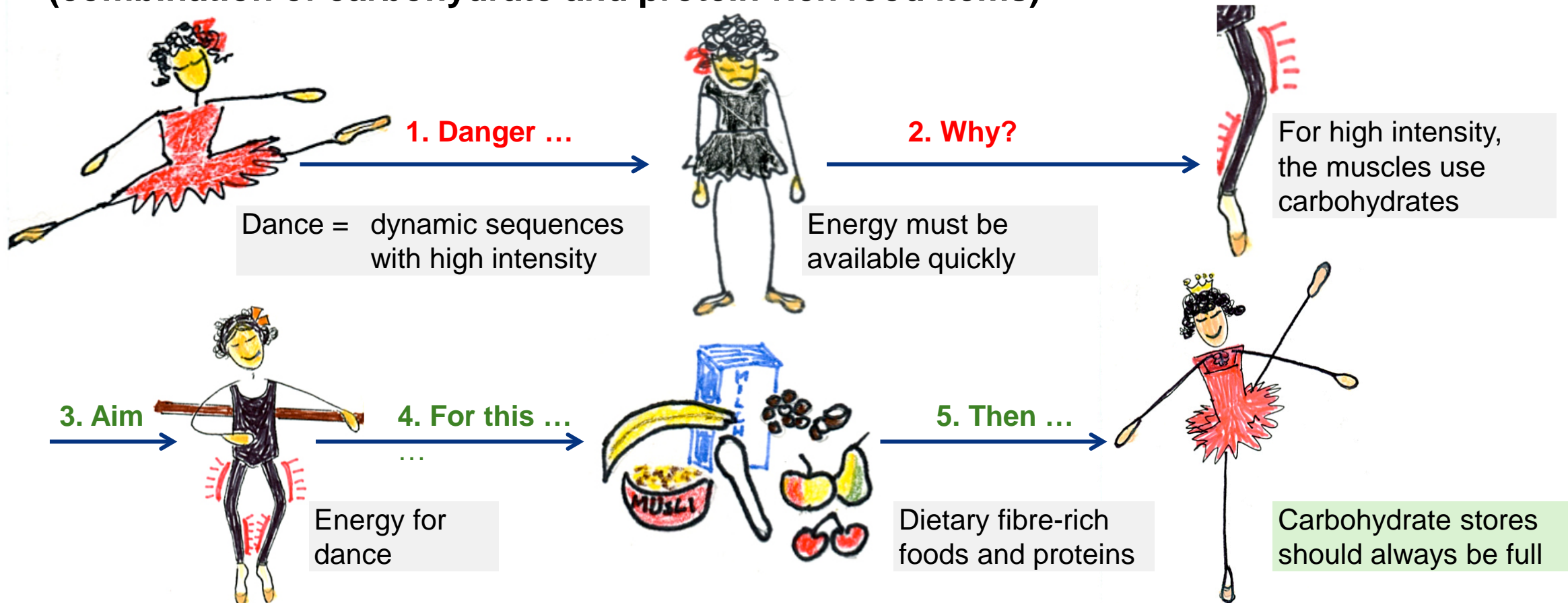
Reference values

PAL	Physical activity level
0.95	Sleep
1.2	Predominantly sedentary or recumbent lifestyle, e.g. bedridden people
1.4–1.5	Predominantly sedentary work, e.g. office workers
1.6–1.7	Sitting activity with some standing and walking activities, e.g. laboratory technician
1.8–1.9	Mainly standing and walking activities, e.g. staff in shops
2.0–2.4	Hard, strenuous physical work, e.g. sportsmen, construction workers

Source: <https://www.dge.de/wissenschaft/referenzwerte/energie/>

Gold standard

(combination of carbohydrate and protein-rich food items)



Prior to dance class

→ Last main meal should have been 2–3 hours ago

Full stomach:

- obstruction of diaphragmatic breathing
- increased accumulation of blood in the digestive tract
- prevention of optimal blood circulation to the muscles

Empty stomach:

- blood sugar level drops
- reduced performance



After dance class

- After about 60 min of training, ingest carbohydrate-rich drinks (not more than 40 g).
- Additional electrolytes (= dissolved minerals) at high temperatures, e.g. vegetable broth, savoury vegetable juices

➔ Rehydration

- Within 1 h after training, carbohydrate-rich meal combined with proteins (4:1)

➔ Regeneration

➔ Replenishing energy stores



“Pas de deux” – nutrition and dance: 10 tips for daily life (1)

- 1) **Port de bras:** Supporting framework of energy supply
→ Plan ahead!
- 2) **Rond de jambe:** Let your thoughts circulate and reflect on the energy intake of the day
→ Nutrition diary
- 3) **Pirouette:** Keep your focus
→ Turn – turn – turn: drink, drink, drink
- 4) **Piqué:** Pangs of hunger!
→ Avoid cravings



“Pas de deux” – nutrition and dance: 10 tips for daily life (2)

- 5) **Chassé:** On tour
→ Things to bear in mind in restaurants and bars
- 6) **Développé:** Have breakfast and the day goes much better
- 7) **Pas de bourrée:** Combination of eating, sleeping, drinking
→ Avoid irritating your senses



“Pas de deux” – nutrition and dance:

10 tips for daily life (3)

8) *Grand jeté*: Energy for big jumps

- ‘Nibbling’ = several times a day, small regular snacks
- Easily digestible, carbohydrate-rich snacks between rehearsals/classes, e.g. vegetables, fruit, homemade snacks
- ‘Five a day’ → 5 portions of fruit and vegetables per day
- Avoid intake of high calorie AND high fat food items at the same time
- Prefer complex carbohydrates containing fibre (whole-grain products, legumes)

9) *Pas de chat*: Do not throw good diet habits overboard in your leisure time

10) *Grand plié*: Enjoying your meals is the basis for everything

Examples of healthy snacks



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Under www.vbg.de/prevention-musical-dance you will find the following additional material:

- Methodological-didactical commentary
- Background information for teachers
- Work sheets
- Media collection