

## Food energy consumption

Literature: <https://www.mdpi.com/1996-1073/12/4/767>

“The system boundaries of this study includes the steps of agricultural production, processing and packaging, distribution and consumption, being therefore realised from “cradle to consumer”.”

**Table 1.** Primary energy demand, nutritional energy provided to consumer and energy return on investment. Values expressed in kilojoules per capita per day and percentage.

Food Category	PED (kJ/cap/day)	Energy Provided to Consumer (kJ/cap/day)	EROI (%)
Eggs	5426	574	10.6
Meat	28,002	1901	6.8
Fish and seafood	16,243	209	1.3
Dairy	7230	938	13.0
Cereals	13,922	3827	27.5
Sweets	799	490	61.3
Pulses	2511	226	9.0
Vegetable oils	3674	2202	60.0
Vegetables	16,894	268	1.6
Fruits	3535	540	15.3
Roots	1691	318	18.8
Total	99,926	11,493	11.5

Normalized to 2250 kcal/d/p (average for men with 2500 kcal/d/p and women with 2000 kcal/d/p)

Vegan 43026 kJ/cap/day

*roots + fruits + vegetables + vegetable oils + pulses + sweets + cereals*

vegan 12 kWh/d/p invested 1156 kcal/d/p nutrition

sum 12 kWh/d/p invested 1156 kcal/d/p nutrition

normalized 23,4 kWh/d/p invested 2250 kcal/d/p nutrition

Vegetarian = Vegan + 12656 kJ/cap/day

*roots + fruits + vegetables + vegetable oils + pulses + sweets + cereals + dairy + eggs*

vegan 12 kWh/d/p invested 1156 kcal/d/p nutrition

dairy, eggs 3,5 kWh/d/p invested 361 kcal/d/p nutrition

sum 15,5 kWh/d/p invested 1517 kcal/d/p nutrition

normalized 23,0 kWh/d/p invested 2250 kcal/d/p nutrition

Pescatarian = Vegan + Vegetarian + 16243 kJ/cap/day pescatarian addition

*roots + fruits + vegetables + vegetable oils + pulses + sweets + cereals + dairy + eggs + fish*

vegan 12 kWh/d/p invested 1156 kcal/d/p nutrition

dairy, eggs 3,5 kWh/d/p invested 361 kcal/d/p nutrition

fish 4,5 kWh/d/p invested 50 kcal/d/p nutrition

sum 20 kWh/d/p invested 1567 kcal/d/p nutrition

normalized 28,7 kWh/d/p invested 2250 kcal/d/p nutrition

Omnivorous = Vegan + Vegetarian + Pescatarian + 28002 kJ/cap/day meat addition

*roots + fruits + vegetables + vegetable oils + pulses + sweets + cereals + dairy + eggs + fish + meat*

vegan 12 kWh/d/p invested 1156 kcal/d/p nutrition

dairy, eggs 3,5 kWh/d/p invested 361 kcal/d/p nutrition

fish 4,5 kWh/d/p invested 50 kcal/d/p nutrition

meat 7,8 kWh/d/p invested 454 kcal/d/p nutrition

sum 27,8 kWh/d/p invested 2021 kcal/d/p nutrition

normalized 31 kWh/d/p invested 2250 kcal/d/p nutrition