

# Sport nutrition

- fuel for sport activity
- incredibly important factor
- carbohydrates vs. fat
- athletes habits

# Training plan

- presents the activity
- endurance, power or strength improvement
- tool for training evaluation

Generating eating plans for athletes using the particle swarm optimization

# Results

Breakfast and dinner meals were generated and are seen from the table. Results were validated and accepted by a sport trainer. Accepting an athlete’s habits and extending the food database is our goal for continuing the research.

Breakfast	Food	Amount	Calories	Food	Amount	Calories	Food	Amount	Calories
1	Banana	225 g	197 kcal	Oat flakes	150 g	591 kcal			
2	Wheat bread	100 g	243 kcal	Plum jam	100 g	244 kcal	Vegan sandwhich	-	316 kcal
3	Poached egg, soya milk	57 g + 200 g	126 + 66 kcal	Corn salad, avocados	149 g + 150 g	37 + 326 kcal	Yogurt	245 g	164 kcal
4	Almonds	100 g	576 kcal	Peach	154 g	70 kcal	Oats beverage	300 g	186 kcal
5	Pasteurized milk	244 g	157 kcal	Corn flakes	122 g	463 kcal			

Dinner	Food	Amount	Calories	Food	Amount	Calories
1	Vegan sandwhich	-	316 kcal	Mushrooms millet	450 g	581 kcal
2	Cheese pies	-	389 kcal			
3	Lentil	200 g	548 kcal	Coconut pancakes	200 g	436 kcal
4	Soya milk	200 g	66 kcal	Avocados	150 g	326 kcal
5	Oats beverage	300 g	186 kcal	Chicken steak	300 g	537 kcal

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