

# **P1752.2 Metabolic Subgroup Meeting**

Working Group Sponsored by IEEE Engineering in  
Medicine & Biology (EMB) Standards Committee

22 August 2023

Teleconference

# Agenda

1. Attendance
2. Review of action items
3. Review of tasks
4. Other business

# Review of Tasks

# Body weight: Continuing the discussion (I)

## Draft schemas

- [Body adiposity index](#) = (hip circumference in cm / (height in m)<sup>1.5</sup>) - 18
- [Relative fat mass](#) = Men: 64 – (20 x height/waist circumference); Women: 76 – (20 x height/waist circumference)
- Waist circumference
- Visceral fat (fat surrounding organs)
- Questions:
  - 1) keep BMI also as standalone schema?
  - 2) naming

# Body weight: Continuing the discussion (II)

- Reviewed Metabolic [landscape analysis](#) document and proposed selection of measures shared by clinical and personal perspectives:
- In draft body-weight schema:
  - Bone
  - Fat
  - Skeletal muscle
  - Water
  - (as mass and %)
- Subgroup recommendations:

# Blood Glucose: Food Intake

- Food intake (important for BG measures)
  - As currently the source is self-report, i.e., a food diary
- Subgroup recommendation
  - What to model?

# USDA FoodData Central

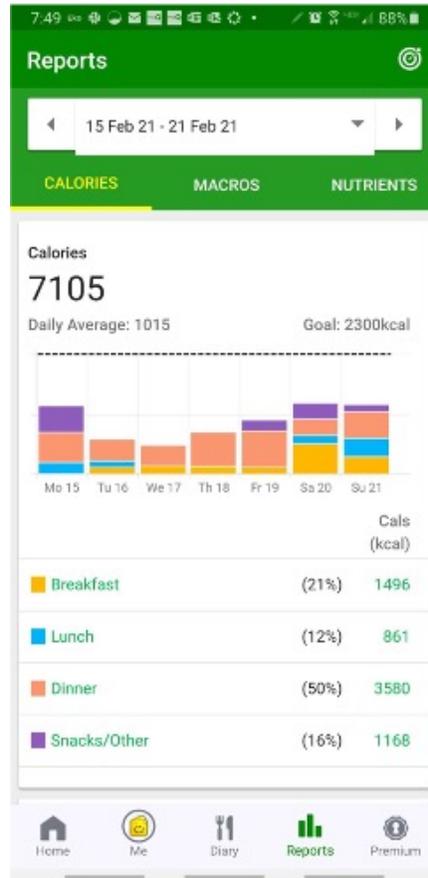
- Foundation Foods Categories

## SR/Foundation Food Category

### ✓ All Categories

- Baked Products
- Beef Products
- Beverages
- Cereal Grains and Pasta
- Dairy and Egg Products
- Fats and Oils
- Finfish and Shellfish Products
- Fruits and Fruit Juices
- Legumes and Legume Products
- Nut and Seed Products
- Pork Products
- Poultry Products
- Restaurant Foods
- Sausages and Luncheon Meats
- Soups, Sauces, and Gravies
- Spices and Herbs
- Sweets
- Vegetables and Vegetable Products

# Food Diary Example



**Reports**

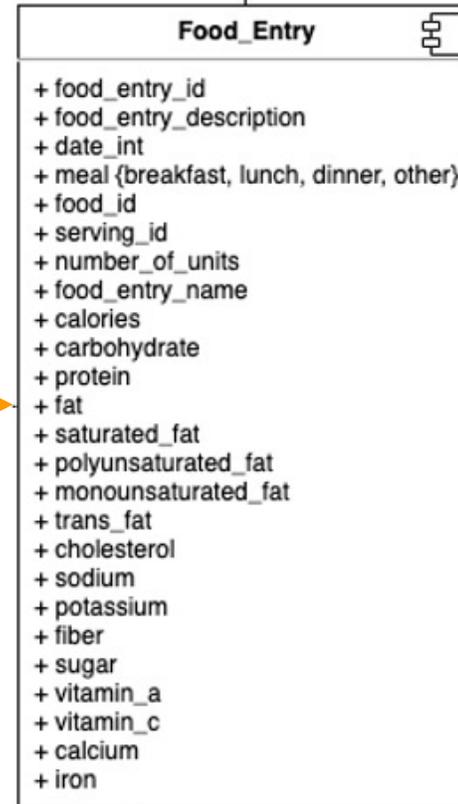
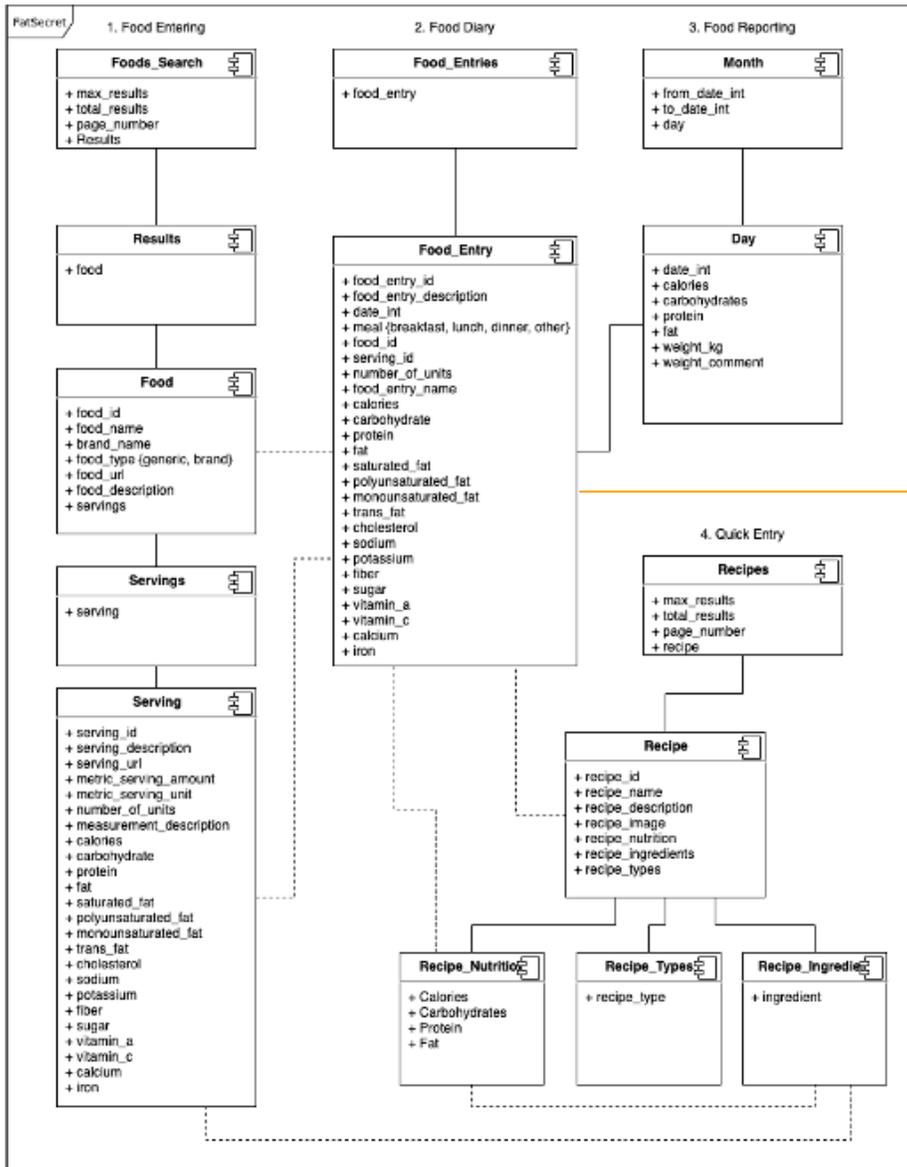
15 Feb 21 - 21 Feb 21

CALORIES MACROS NUTRIENTS

**Nutrients**

Nutrient	Total	Goal	+/-
Calories (kcal)	7105	16100	-8995
Protein (g)	485	1407	-922
Carbohydrate (g)	559	1407	-848
Fiber (g)	68	-	-
Sugar (g)	217	-	-
Fat (g)	265	539	-274
Saturated Fat (g)	81	-	-
Polyunsaturated Fat (g)	26	-	-
Monounsaturated Fat (g)	50	-	-

# Data Model



Consider for modeling:  
**Food Entry**  
**Serving**  
**Food**

Or maybe omit **Serving** and focus on the consumption of food in terms of grams or kcals for each of the related entries

# Summary of Action Items

Next Meeting

# Upcoming Meeting

- Metabolic subgroup:
  - Tuesday, September 12 at 8 am Pacific