

“If you think SNOMED CT is just a list of terms you are doing it wrong”

**QUOTE ANNON**

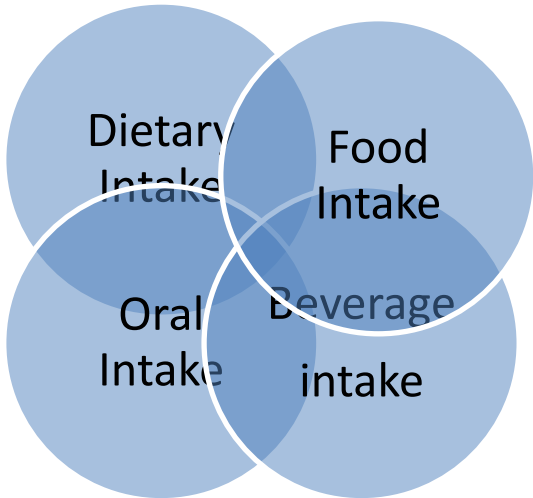
# Proposed Hierarchy Discussion

Questions to determine further placement of Dietary intake, Food intake, Beverage intake, Energy intake in the hierarchy

1. What is included in: Dietary intake? Food intake? Beverage intake?

With what context are you asking the question?

The answer will depend on this e.g are you talking about the process of investigating this (procedure), a clinical finding of, or a historical one e.g maternal nutrition



Within the main SNOMED hierarchy there are two potential options for these either within the Substance or Pharmaceutical/ Biological

- |  |   |
|--|---|
| <ul style="list-style-type: none"><li>• <b>Substance</b><ul style="list-style-type: none"><li>○ Edible<ul style="list-style-type: none"><li>• Food</li><li>• Beverage</li><li>• Enteral</li></ul></li><li>○ Biological<ul style="list-style-type: none"><li>▪ Nutrients<ul style="list-style-type: none"><li>▪ CHO</li><li>▪ FAT</li><li>etc</li></ul></li></ul></li></ul></li></ul> | <ul style="list-style-type: none"><li>• <b>Pharmaceutical / Biological product</b><ul style="list-style-type: none"><li>○ Dietary Product<ul style="list-style-type: none"><li>▪ Foods and Drinks</li><li>▪ Foods for Special diets</li><li>▪ Infant formula</li></ul></li><li>○ Medicinal Product<ul style="list-style-type: none"><li>• Medicinal Product categorised by therapeutic role<ul style="list-style-type: none"><li>• FAT supplement</li></ul></li><li>• Product manufactured as Parenteral dose</li><li>• Product manufactured as oral dose</li></ul></li></ul></li></ul> |
|--|---|

Parents

Substance (substance)

Substance

Parents

Substance (substance)

Biological substance (substance)

Edible substance (substance)

SCTID: 762766007

762766007 | Edible substance (substance) |

en Edible substance (substance)  
en Edible substance

Nutrients (substance)

SCTID: 226355009

226355009 | Nutrients (substance) |

en Nutrients  
en Nutrients (substance)

Children (8)

- Beverage whiteners (substance)
- Bioactive substance (substance)
- Drinks (substance)
- Enteral dietary supplement (substance)
- Food additive (substance)
- Foods (substance)
- General food and drink types (substance)
- Protein and protein derivatives (substance)

Edible substance

Biological Substance

Food

Beverage

Enteral

Etc

Nutrients

Carbohydrates

Dietary fat

Dietary Fibre

Protein and  
Protien  
Derivatives

Vitamin /Trace  
element

Children (5)

- Carbohydrate (substance)
- Dietary fat (substance)
- Dietary fiber (substance)
- Protein and protein derivatives (substance)
- Vitamin / trace element (substance)

## Parents

- ▶  Substance (substance)

 Edible substance (substance)  






SCTID: 762766007

762766007 | Edible substance (substance) |

*en* Edible substance (substance)

*en* Edible substance

## Children (8)

-  Beverage whiteners (substance)
  - ▶  Bioactive substance (substance)
  - ▶  Drinks (substance)
  -  Enteral dietary supplement (substance)
  - ▶  Food additive (substance)
  - ▶  Foods (substance)
  - ▶  General food and drink types (substance)
  - ▶  Protein and protein derivatives (substance)
- ▼  Protein and protein derivatives (substance)
    - ▶  Amino acid (substance)
    - ▶  Gelatin (substance)
    - ▶  Gliadin (substance)
    - ▶  Soy bean product (substance)

- ▼  Bioactive substance (substance)
  -  Beta glucan (substance)
  -  Non-nutritive food additive (substance)
  -  Plant stanol ester (substance)
  -  Plant sterol ester (substance)
- ▼  Drinks (substance)
  - ▶  Alcoholic beverage (substance)
  - ▶  Carbonated drink (substance)
  - ▶  Coffee (substance)
  - ▶  Fruit squash drink (substance)
  - ▶  Juice (substance)
  - ▶  Milky drink (substance)
  -  Non-carbonated drink (substance)
  -  Sports drink (substance)
  - ▶  Tea (substance)
- ▼  Food additive (substance)
  -  Carrageenan (substance)
  - ▶  Food antioxidant (substance)
  - ▶  Food coloring (substance)
  - ▶  Food flavoring agent (substance)
  - ▶  Food preservative (substance)
  - ▶  Food sweetener (substance)
  - ▶  Gelatin (substance)
- ▼  General food and drink types (substance)
  -  Dietary fluid (substance)
  - ▶  Drink types (substance)
  - ▶  Fluid consistency type (substance)
  - ▶  General food types (substance)
  - ▶  Juice (substance)

Foods (substance)



SCTID: 255620007

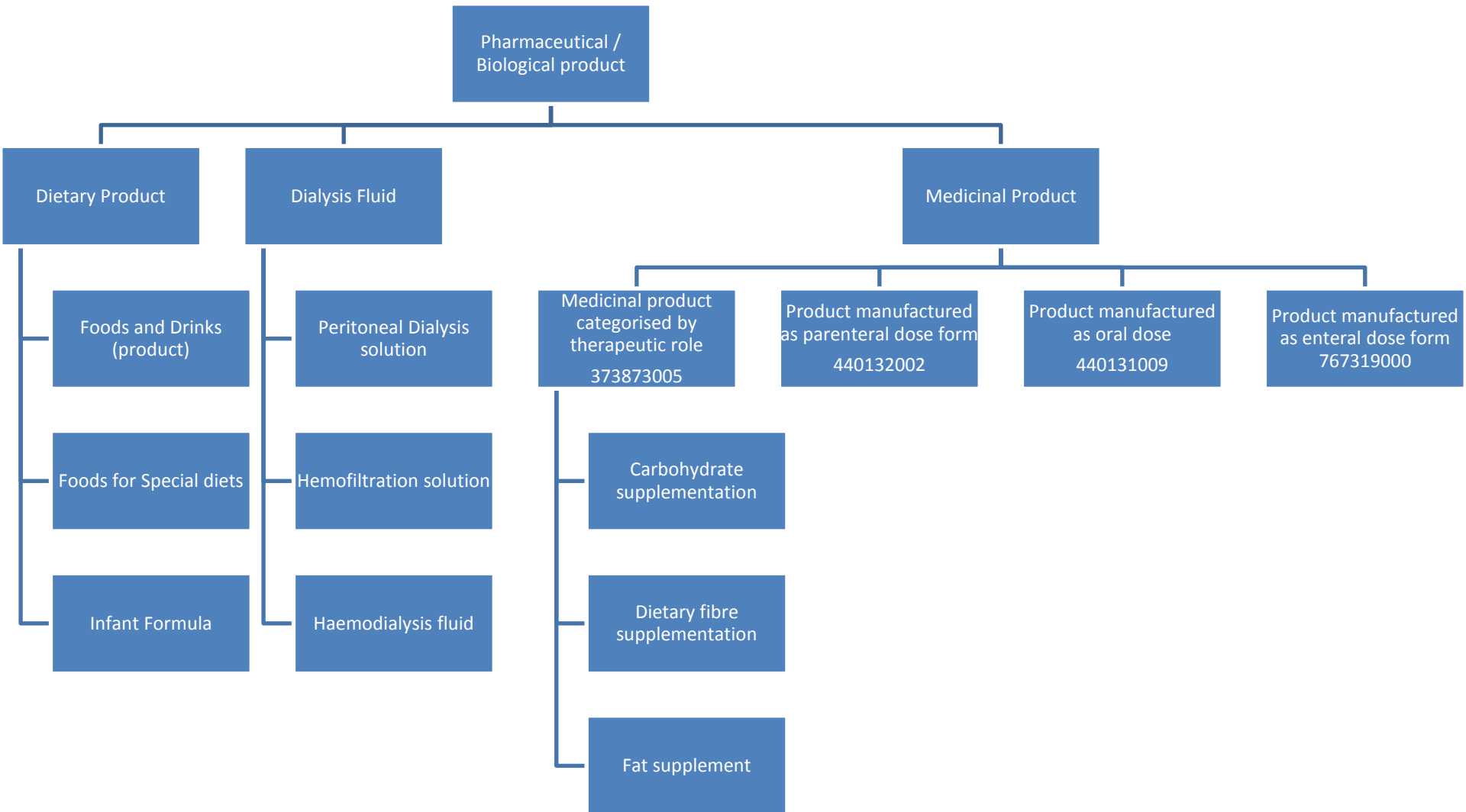
255620007 | Foods (substance) |

en Foods

en Foods (substance)

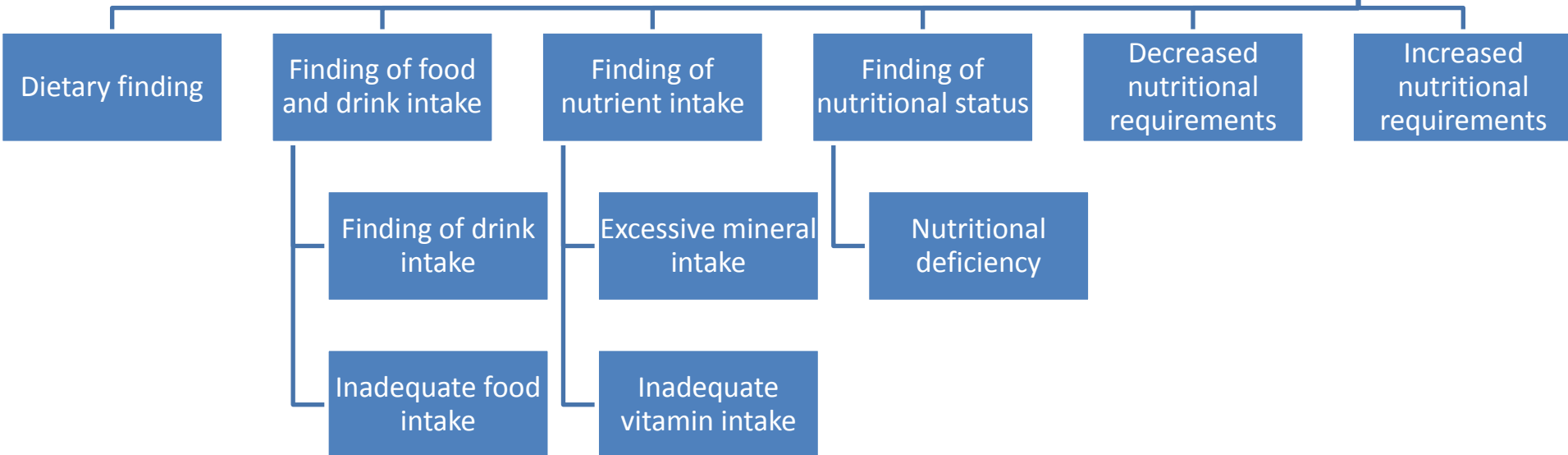
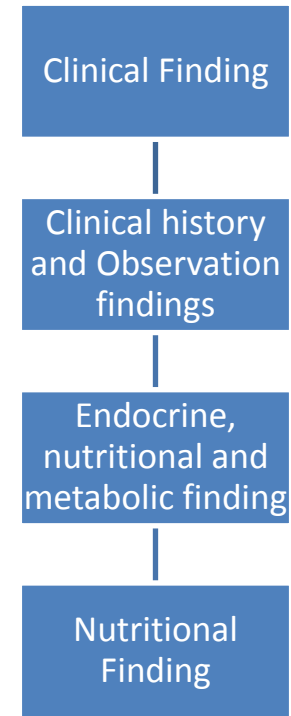
## Children (24)

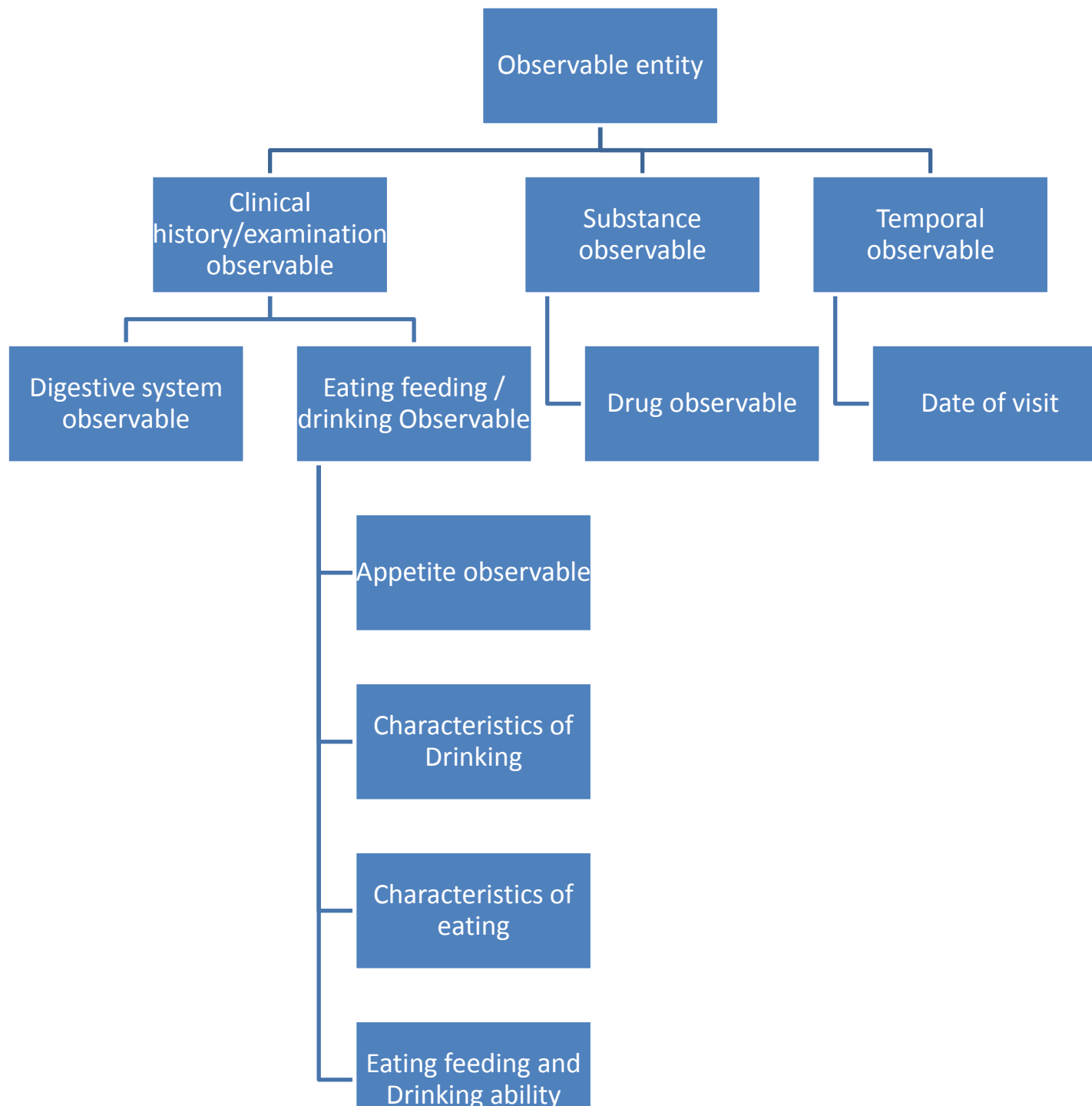
- > Animal feed (substance)
- > Animal milk protein (substance)
- > Bran (substance)
- Cochineal stain (substance)
- > Dairy foods (substance)
- > Dessert (substance)
- > Eggs (edible) (substance)
- > Fats and oils (substance)
- Food particle (substance)
- > Food starch (substance)
- > Fruit nuts and seeds (substance)
- Gluten (substance)
- Gluten (substance)
- > Grain (substance)
- Guar gum (substance)
- > Meat (substance)
- > Mollusk (substance)
- > Pudding (substance)
- > Sandwich (substance)
- > Sauces seasonings and soups (substance)
- > Savory food (substance)
- > Seafood (substance)
- > Starchy food (substance)
- > Sugary food (substance)
- > Vegetables pulses herbs and spices (substance)



- Once we are clear with the context of the thing (edible substance biologic vs pharmaceutical) we can then look to the next issue

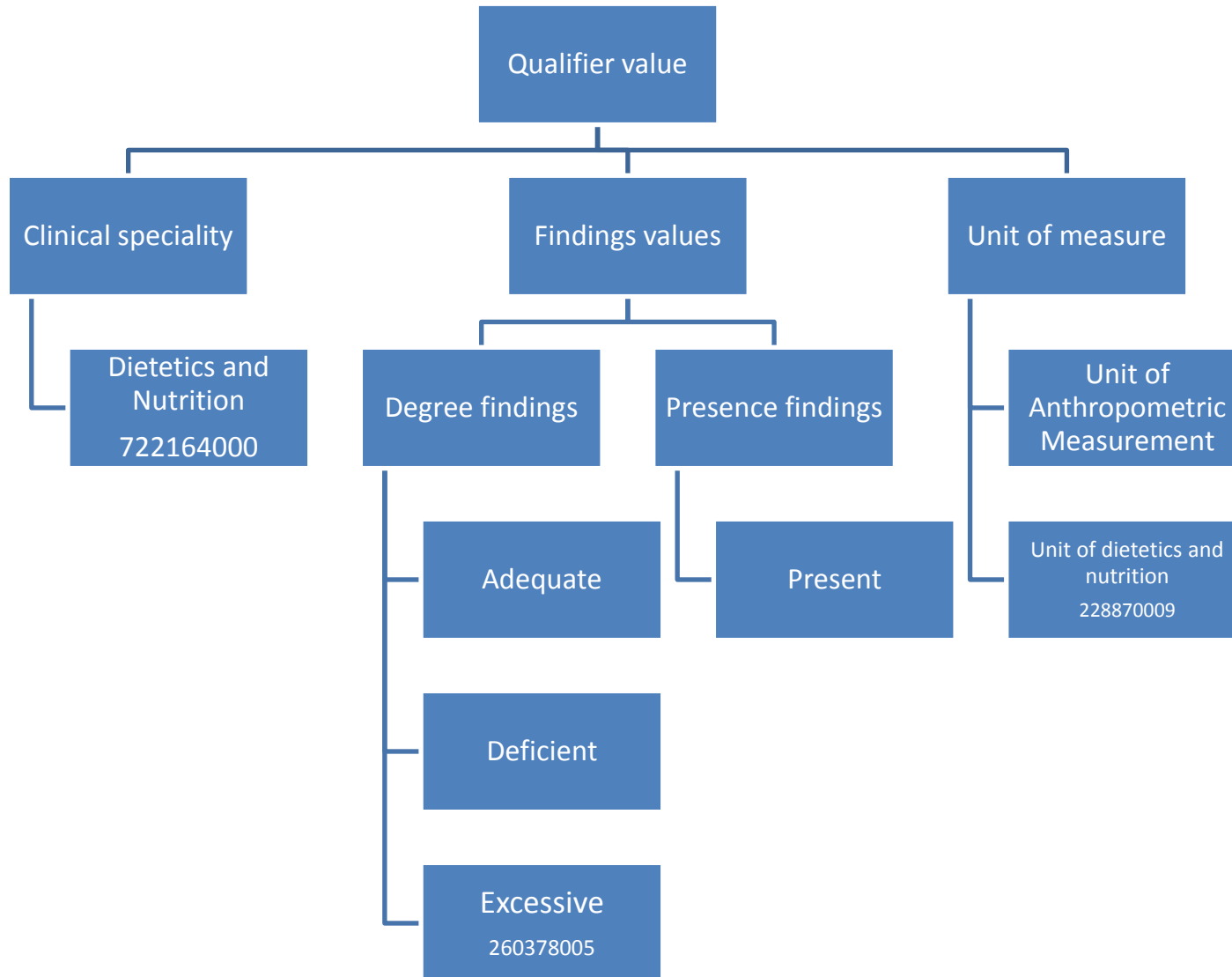
How is intake defined i.e Nutritional finding vs Eating or feeding observable







# Then how you qualify these substances /findings



# This is why context is so important

- Within Nutrition there are the following high level concepts we need to consider
  - Clinical finding (elevated blood potassium level)
  - Observable entity (
  - Pharmaceutical / biologic Product
  - Substance
  - Qualifier value (insufficient or sufficient intake?)
  - Procedure
  - Situation with explicit context
  - Staging and scales

This is the power of SNOMED the various terms from the hierarchy are used as a constellation to define what it is you are talking about. This makes it easier to relate terms using the interlinked numbers and why SNOMED CT is not a list

**2 Are Dietary intake, Food intake, or Beverage intake the same as (equivalent to) or different from Nutrient intake?**

- **Depends on nutrient in question. They could be but if the nutrient is not contained in the food beverage or diet then they are not.**

3. Are any of these (Dietary, Food, Beverage) equivalent to Oral intake?

- Potentially and only if these Intake are taken Orally

4. Where are nutrition supplements included—Nutrient intake, Dietary intake, Food intake, or Beverage intake?

May be easier to have these fall under dietary product (Pharmaceutical / Biological product)

## 5. Is Energy intake the same as or different from Nutrient intake?

Different Energy would be a quantifier value that could be attributed to each nutrient e.g

1g Carbohydrate or Protein = 4calories

1g Fat = 9 calories

# 6. Which, if any, of the following are children of Nutrient intake?

I am assuming that you are referring to Nutritional findings here

- Food intake – food contains nutrients so **NO**
- Dietary intake – Dietary intake consists of food and nutrients so **NO**
- Beverage intake, including water? Beverages consist of nutrients so **NO**
- Fat intake Fat is a nutrient **Yes**
- Protein. Do you mean protein intake if you so it is a nutrient **Yes** If it is just protein intake is not specified so it is a **NO**
- Carbohydrate intake Carbohydrate is a nutrient **Yes**
- Fiber intake Fat is a nutrient **Yes**
- Bioactive substance intake (alcohol, plant sterol esters/soy, caffeine)  
these can be a nutrient **Yes**
- Vitamin intake these are nutrients **Yes**
- Mineral intake these are nutrients **Yes**



7 Where do breastmilk and infant formula fit? Food intake?  
Beverage intake? Nutrient intake

- This should be in both  
edible substance(Substance)

AND

dietary product (Pharmaceutical / Biological product) e.g when expressed breast milk administered in quantifiable means