



# Successfully writing a dossier!

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*NutriClaim*

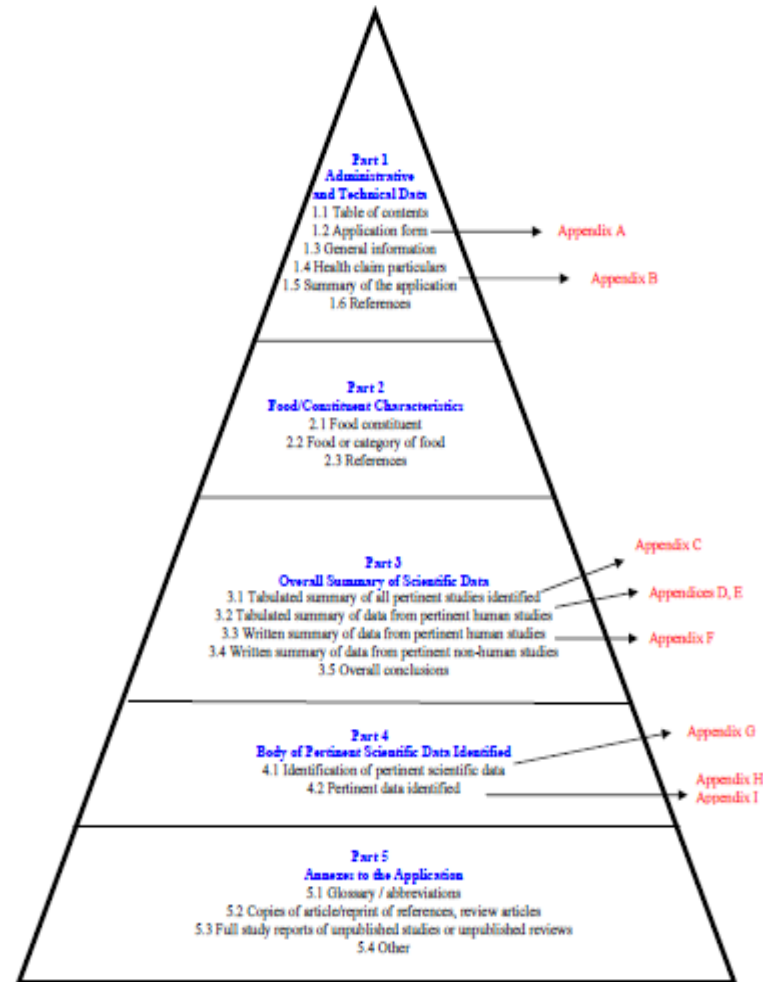


# The Process

- How we started
- How we collated the information and results
- Putting it all on paper

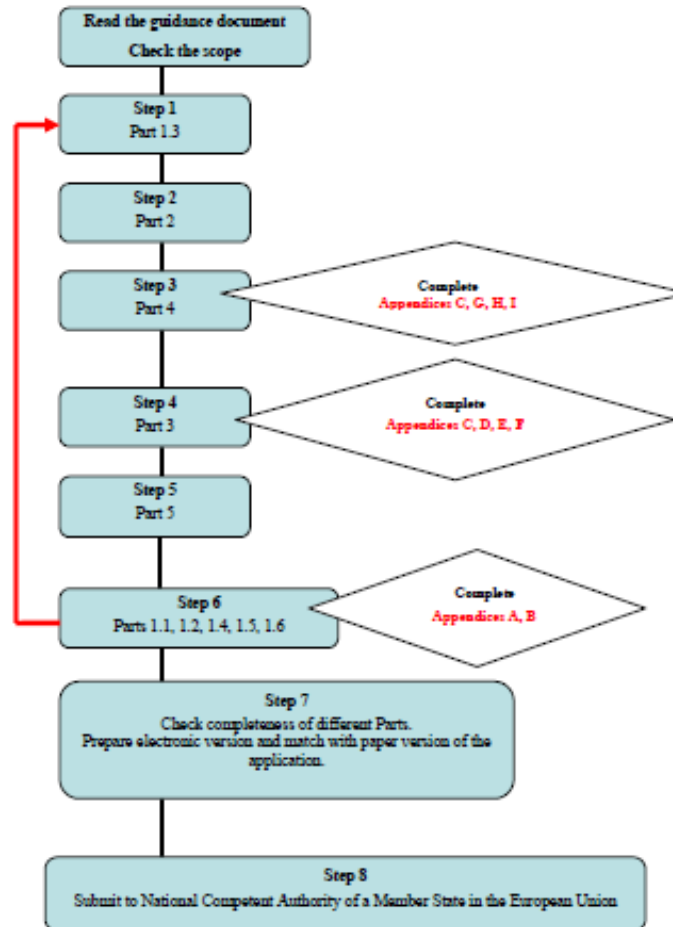


# The Process





# The Process





# The Competencies

- Detective
- Plot writing
- Homo Ludens



"I have the advantage of knowing your habits, my dear Watson," said he. "When your round is a short one you walk, and when it is a long one you use a hansom. As I perceive that your boots, although used, are by no means dirty, I cannot doubt that you are at present busy enough to justify the hansom."

"Excellent!" I cried.

"Elementary," said he.



"You will not apply my precept," he said, shaking his head.

"How often have I said to you that when you have eliminated the impossible, whatever remains, however improbable, must be the truth?"



# Plot

There's something beautiful about plot.

Plot is about pattern and meaning.

The human mind is geared towards patterns and relationships and filling in the gaps; we want to know how everything connects, whether we're scientists puzzling out the mysteries of the universe





# Plot

“Any exercise in storytelling is an exercise in making meaning: taking the seemingly random and disparate elements of life and showing how they weave together”

“There’s a rich intellectual satisfaction in that”.



# Plot

Perhaps one of the problems with plot is the visual metaphor through which it's so often presented.

Plot is often described as the scaffolding or skeleton on which you hang the elements of your story. This gives the idea of plot as something constructed and workmanlike...and solid, and fixed, as if the 'bones' of plot are the bars that hem you in creatively.



# Plot

*We tend to talk about plots as if they were objects.  
All of our plot metaphors describe plot as if it  
were some tangible thing that came in a box*

We talk about plot as if it were a dead thing,  
something static...Plot is dynamic, not static.

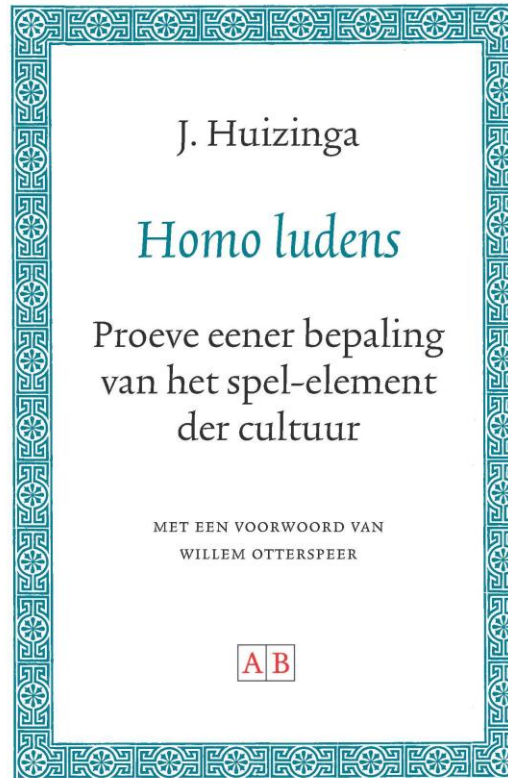


# Plot

“In order for the outline to be effective, I had to keep revising it as the novel progressed, so that the outline informs the novel but the growing novel also informs the outline. Since plot isn’t static, the outline couldn’t be either, nor the relationship between the two.”



# Homo Ludens



Athenaeum Boekhandel Canon



# The playing human

Playing is a basic necessity for a fulfilled life

Imagination and creativity, that are challenged to its fullest in the game fully, underlie scientific discoveries and technological developments - these having an obvious socially "useful" extension.



## Characteristics of play (Huizinga)

To set the scene of the play that he will unfold gradually, Huizinga identifies 5 characteristics that play must have:

Play is free, is in fact freedom.

Play is not “ordinary” or “real” life.

Play is distinct from “ordinary” life both as to locality and duration.

Play creates order, is order. Play demands order absolute and supreme.

Play is connected with no material interest, and no profit can be gained from it.



# Down to business - getting started

- Reg. 1924/2006  
+
- Scientific and Technical guidance (EFSA)  
+
- Guidance on the implementation of Reg. 1924/2006 (SCFCAH)  
+
- Revised FAQ on health claims (EFSA)





# How to start?

- Food operator:
  - food
  - ingredient in food (naturally present/added)
- Ingredient supplier:
  - ingredient



# Health benefit

Health Benefit/Claim wording		
Product (EFSA-Q-2008)	Submitted by applicant	Interpreted by EFSA
Melgaco mineral water (219)	Reduces body hyperglycemic level	Reduces risk of type 2 diabetes
Elancyl Global Silhouette (265)	Your silhouette is apparently and globally redrawn, resculpted and refined	Change in body weight, fat mass, lean mass, waist, hip and thigh circumference



# Health benefit

## Beneficial to human health?

- Validity of endpoint
- Size of effect (not only statistically significant, but also physiologically relevant)
- Benefit in EU populations (the general population!)

*Only one per dossier!*



# Type of Claim

## Art. 13.5:

- claims referring to role of nutrient/substance in growth, development and the functions of the body
- physiological and behavioural functions
- claims referring to slimming, weight-control, ↑satiety, ↓sense of hunger, ↓of available energy from the diet

&

- based on newly developed scientific evidence
- including a request for proprietary data protection



# Type of Claim

## Art. 14:

- claims referring to reduction of disease risk (risk factor!)
- claims referring to children's development and health



# Risk factor

## Eligibility:

- Established
  - Not established - still valid? (dental plaque!)
- Independent
  - univariate vs multivariate
- Measured by established methods
  - Different methods? - comparability? (Provexis; Cognition)



# Disease?

Eligibility:

- ICD-10

Risk factor also disease (ICD-10)?

- Hypertension



# Risk factor/disease

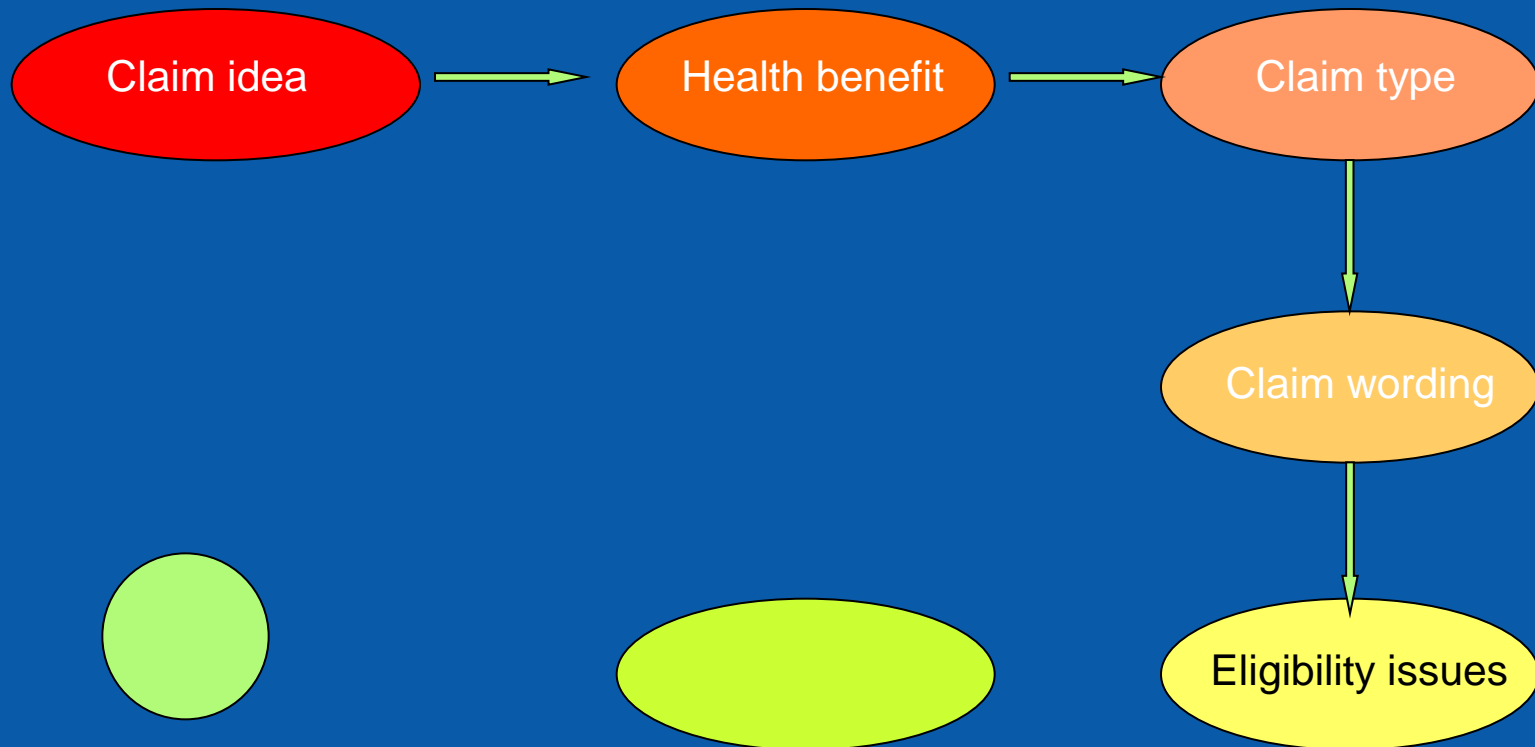
## Established risk factor:

- Effect substance/nutrient on risk factor, not on disease

## Not established risk factor:

- effect on risk factor and disease (xylitol/dental plaque/caries)







# Literature search

Literature search must be adequately described

- Databases searched
- Keywords used
- Limits applied (time range, up to date ...., RCTs, etc.)
- Hand search?

→ Identification of body of evidence



# Processing literature search

Compose table



# Selection of pertinent evidence

## Clear description of inclusion and exclusion criteria

- study quality
- target population
- is the food/constituent the one for which the scientific evidence is based
- dose
- status
- health benefit primary (or secondary) outcome
- health benefit clearly defined
- method of measurement of health benefit
- .....



# Selection of pertinent evidence

*Caution!!*

Reasons to exclude study  
'significantly different'  
from  
reasons to discount study



# Study quality

Clinical studies must meet high standards of methodological quality:

- Properly controlled
- Sufficiently powered
- Appropriately controlled for confounding factors
- Preferably ITT analysis although PP may be sufficient
- Small sample sizes and high drop-out rates usually give not much weight



# Study quality

## Statistics!

- Significance must be between groups and not within groups
- Transient significant effects and significant post hoc analysis will not be given much weight
- Not only statistical significance
- Relevance of biological/physiological significance (difference between groups must be clinically meaningful)
- Significant but modest changes will most likely be discounted



# Target population

Populations studies must be relevant to target populations

- Adults vs. children
- Health status
- Age
- Dietary background and lifestyle
- Patients vs. healthy individuals (caution!)





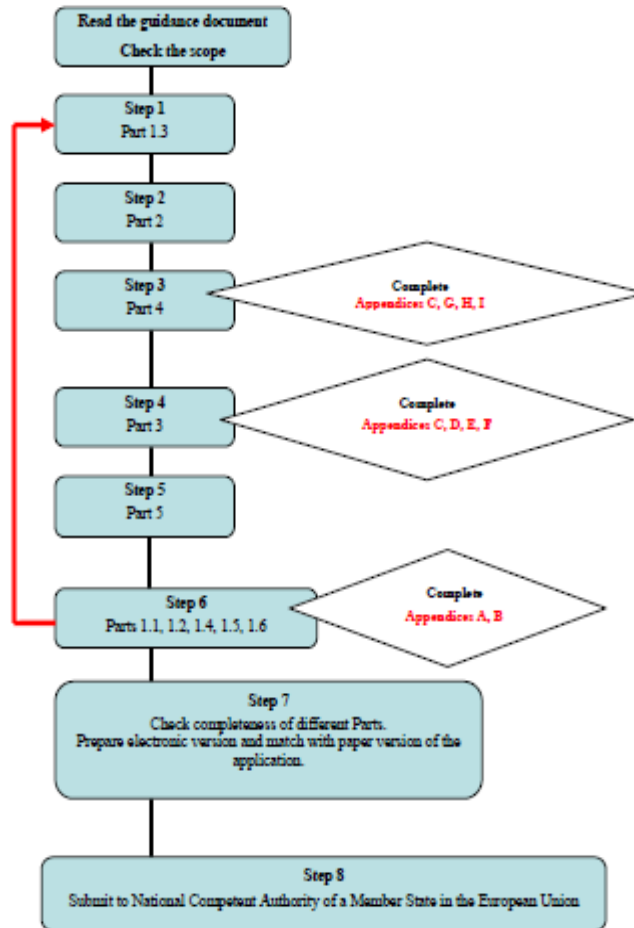
# Product specific claim

If brand name is mentioned in the wording of the claim → absolute necessity of clinical studies with product or equivalent product

- Otherwise, study may be discounted
  - Probiotics - no data on different strains
  - Multi-component products - only one or some components studied
  - Different formats/matrices studies (e.g. dried vs extract)
  - Extracts - standardization



# Collating the data





# Rule of thumb

In all cases where the guidance is not clear about what to do, provide a rationale!



# EFSA's magic words

*“Case by case basis”*



# Scientific substantiation

*“All the evidence from the pertinent studies (i.e, studies from which scientific conclusions can be drawn for substantiation of the claim) is weighed with respect to its overall strength, consistency and biological plausibility, taking into account the quality of individual studies and with particular regard to the population group for which the claim is intended and the conditions of use proposed for the claimed effect,”*



# Scientific substantiation

*“A grade is not assigned to the evidence. While studies in animals or in vitro may provide supportive evidence, human data are central for the substantiation of the claim...”*

How do you go about *weighing without grading!*?

Implications:

- grading - qualified health claims (cf. US)
- no (official) grading - implicit grading!