

#### Vitenskapskomiteen for mat og miljø

Norwegian Scientific Committee for Food and Environment

### Cecilie Rolstad Denby

Director General for the Norwegian Scientific Committee for Food and Environment (VKM) Member to the EFSA Advisory Forum from 1 August 2019





# Cecilies background

N M J

Professor, dr. scient Geomatics Norwegian University of Life Sciences





- Earth Observation/Remote Sensing
- Climate/Polar regions

Head of Dept./interim Dean at Faculty of Science and technology

- Agriculture
  - Applied robotics
  - Data Science









## Organisation of VKM

- Ministry of Health and Care Services (HOD)
- Ministry of Agriculture and Food
- Ministry of Climate and Environment
- Ministry of Trade, Industry and Fisheries
- Secretariate 23 full time staff members
- Scienitific committe
  - 100 national/international academics in 11 scientific panels
  - Scientific evaluation members appointed by HOD for 4 years
  - Declaration of conflict of interest/hability







# VKM's scientific panels 2019 - 2022



#### Alien Organisms and trade in Endangered Species (CITES)

This Panel is responsible for assessments of risks to Norwegian biodiversity from the import and keeping/release of alien organisms. The Panel also evaluates applications for import/export and listing proposals under the Convention on International Trade in Endangered Species (CITES).



#### Animal feed

This Panel carries out risk assessments concerning feed for terrestrial and aquatic animals, including production methods, raw materials, additives, infectious substances, and genetically modified organisms. The assessments also include how feed affects animal health.



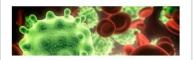
#### Animal health and welfare

This Panel carries out risk assessments on animal health and welfare, with particular focus on food-producing animals, including both farmed and wild fish.



#### **Plant Health**

This Panel conducts risk assessments concerned with issues on plant pests and organisms that can harm plants, plant products, and biological diversity.



#### **Biological Hazards**

This Panel conducts risk assessments related to microbiological food hygiene, contamination of food by microorganisms pathogenic to humans, and transmissible spondiform encephalopathies.



#### Contaminants

This Panel is responsible for risk assessments on environmental contaminants and other pollutants, process-related chemicals, natural toxins, and residues of veterinary and human pharmaceutical substances in food.



#### **Food Additive**

This Panel is responsible for assessing issues on safety in the use of food additives, flavourings, processing aids, materials in contact with food and drinking water, chemicals used for water treatment, and residues from bloicides. In addition, this Panel is responsible for safety evaluations of cosmetics.



#### **Plant Protection Products**

This Panel carries out risk assessments of chemical and biological plant protection products, and their residues in food. Norway has an exemption from EU regulations in this area, which means that all plant protection products have to be nationally approved by the Norwegian Food Safety Authority.



#### **Genetically Modified Organisms**

This Panel carries out health and environmental risk assessments of genetically modified organisms, and processed food and feed. Additionally, the Panel carries out risk assessments in connection with national applications for use or introduction of GMOs.



#### Microbial Ecology

This panel's working areas include environmental and/or health risk assessments regarding the release/import of microorganisms and the use of medicinal products containing or consisting of genetically modified organisms, as well as microbiological products for diverse uses.



#### <u>Nutrition, Dietetic Products, Novel</u> <u>Food and Allergy</u>

This Panel is responsible for risk assessments concerning the issues of human nutrition, dietetic products, food supplements, novel foods, and food allergies, including food fortification, and food supplements and health claims.



# Interdiciplinary risk assessments on food and environment

- requested
- self-tasking, own initiative







# VKM's project protocols with public consultations

## **Published protocols**

- Risk assessment of butylated hydroxytoluene
- Risk-benefit assessment of sunscreen
- Risk assessment of energy drinks and caffeine



## **Protocols under preparation**

- Risk assessment of dioxins and dioxin-like PCBs in food in Norway
- Total exposure assessment of caffeine
- Risk-benefit assessment of fish



Protocol for the risk assessment of butylated hydroxytoluene (BHT)







# VKM's ongoing risk assessments

Alien Organisms and trade in Endangered Species (CITES)
Will assess the risk from an increase of pink salmon in Norway

Animal feed

Risk assessment of potentially toxic metals in soil and fertiliser products - fate and effects in the food chain and the environment

Nutrition, Dietetic Products, Novel Food and Allergy lodine fortification of table salt

Scientific Steering Committee

Microplastics - occurrence and implications for food safety and environment in Norway

Plant Health

Flea beetles -- risk to plant health

Alien Organisms and trade in Endangered Species (CITES)

Assessing the impact imported cleaner fish can have on the environment

Food Additives

Risk assessment of the synthetic antioxidant butylhydroxytoluene (BHT)

Food Additives

Risk-benefit assessment of use of sunscreen

Food Additives

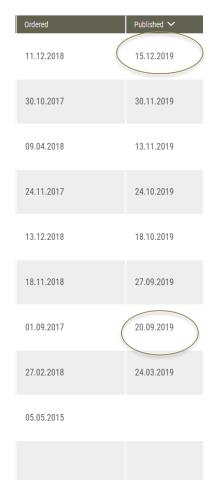
Risk assessment of «other substances»

Alien Organisms and trade in Endangered Species (CITES)

Evaluation of the scientific basis for regulation of trade in endangered wildlife

Contaminants

Risk assessment of dioxins and dI-PCBs in food



15.02.2019



# Risk assessment of BHT, E321 butylated hydroxytoluene

## **Background: BHT**

- is characterised by extensive use and multiple exposure sources and routes
- helps preserve and stabilise the flavour, colour, freshness and nutritive value of foods and animal feed products
- improve the stability of pharmaceuticals, fat-soluble vitamins, personal care products, biomaterials, petroleum products, synthetic rubbers and plastics, etc.
- To our knowledge, risk assessments including exposure estimates for BHT from several sources and exposure pathways have not been performed

**Aim:** Assess whether the BHT exposure constitute a health risk to the Norwegian adult population





## **Exposure estimation**

## Questions addressed in the exposure assessment:

- What are the exposure levels and sources of BHT from **foods**?
- What are the exposure levels and sources of BHT from personal care products?
- What are the exposure levels and sources of BHT from indoor dust?
- What is the total internal exposure to BHT?
- The Norwegian survey Norkost 3 was used to address food consumption
- The Norwegian survey EuroMix was used to address both food consumption and cosmetic use (frequency)

### Exposure assessment:

- «realistic» exposure scenario: data considered the most realistic for the Norwegian exposure were used
- «high» exposure scenario: more conservative choices were used



# Euromix – a biomonitoring study

The BTH study is uploaded in the EuroMix toolbox (Monte Carlo Risk Assessment) and food consumption is expressed as food categories used by EFSA (FoodEx2)

## The study includes:

- 2 x 24h detailed weighed diaries on food consumption and personal care product use
- Biological material (24 hour urine, blood, white bood cells .....)

## The study makes it possible to address:

- combined exposure to chemicals
- exposure from different sources and exposure routes
- covariance between oral and dermal exposure







## VKM 2020: National Scientific Authority (SA) for CITES



Article IX of the CITES Convention requires each Party to designate:

- one or more Management Authorities competent to grant permits or certificates on behalf of that Party
- one or more Scientific Authorities to advise the Management Authorities



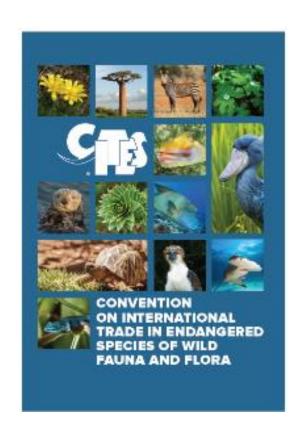
# VKM as CITES Scientific Authority

#### Main task:

To assess whether export/import of specimens of CITES-species would be detrimental to the survival of the species in the wild

### Other tasks:

- Participate in CITES meetings and workshops
- Assessment of proposed amendments to the CITES Appendices
- Participate in CITES working groups









VKM Report 2019: 10

A CITES risk assessment for the common minke whale (*Balaenoptera acutorostrata*)

Opinion of the Panel on Alien organisms and trade in endangered species (CITES) of the Norwegian Scientific Committee for Food and Environment





VKM Report 2019: 11

Assessment of species listing proposals for CITES CoP18

Scientific opinion of the Norwegian Scientific Committee for Food and Environment

# Risk assessment from an increase of pink salmon in Norway

On request from Norwegain food safety authority and Norwegian Environment agency

## Key message:

What will happen to the wild salmon populations and the river ecosystems if pink salmon is established in Norwegian rivers? What is the risk associated with new pathogens introduced by pink salmon, and how can this affect aquaculture?

VKM's panel on Alien Organisms and Trade in Endangered Species (CITES) will be responsible for the risk assessment. The report will be published in December 2019.







## VKM looks forward to continued good cooperation with the EFSA members!

Thank you for the attention!

Kiitos!



