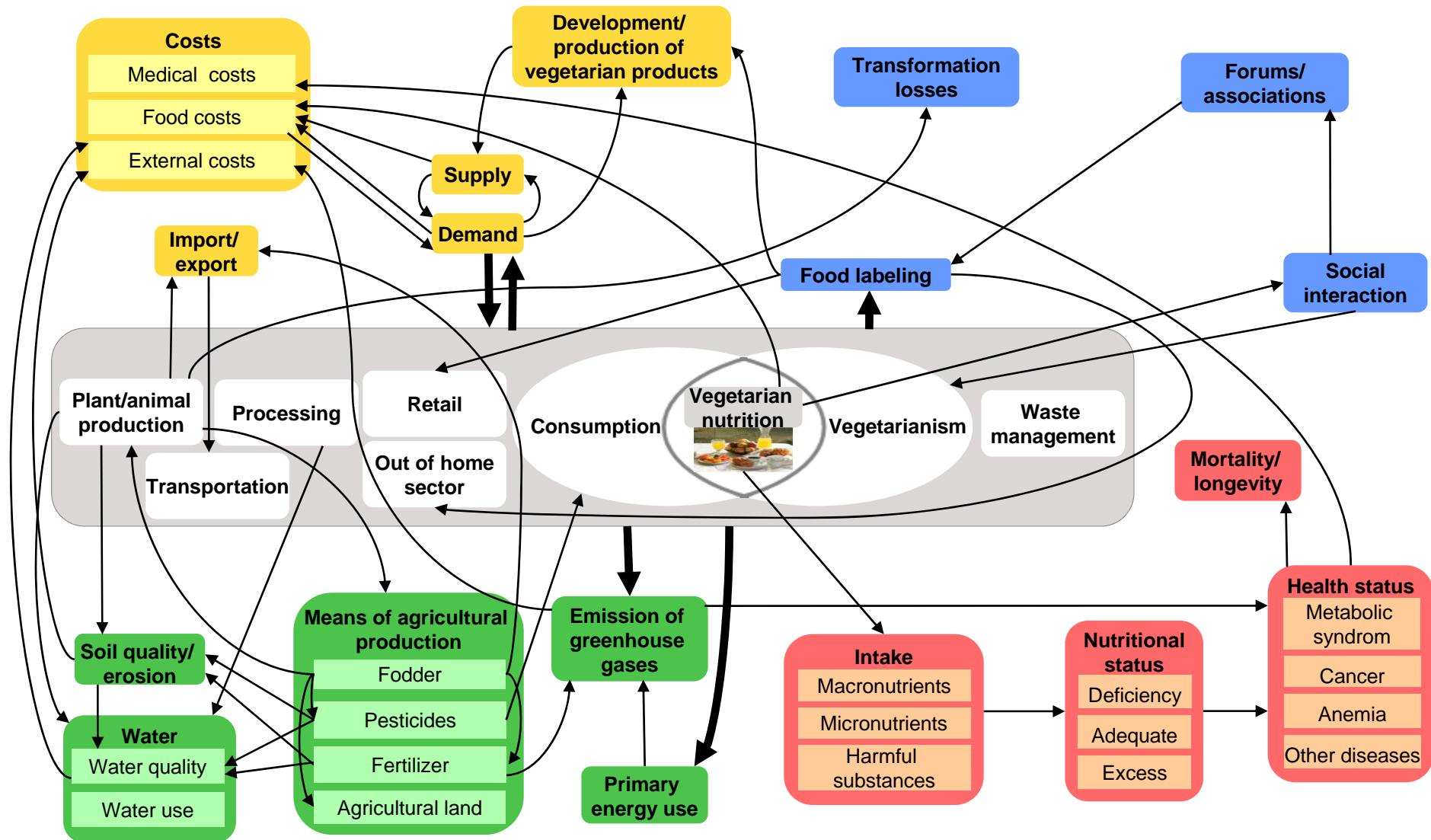


Vegetarian Nutrition Model



Effects allocated to the four dimensions of nutrition

Health

Ecology

Economy

Society

Causal relationship

Causal relationship affecting and caused by all parts of the food-supply chain

Grouped effects

Social interaction

**Forums/
associations**



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Forums/ associations

Food labeling

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Social interaction

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Social interaction

Vegetarianism

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Food labeling

Out of home sector

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**Plant/animal
production**

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**Plant/animal
production**

**Means of agricultural
production**

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Processing

Water

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**Mortality/
longevity**

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Nutritional status

Health status

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Nutritional status

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Nutritional status

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Intake

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Intake

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Food labeling

**Development/
production of
vegetarian products**

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Demand

**Development/
production of
vegetarian products**

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**Development/
production of
vegetarian products**

Supply



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Demand

Supply



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Supply

Demand



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Demand

Food costs

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Supply

Food costs



Mankiw G: Grundzüge der Volkswirtschaftslehre. Schäffer-Poeschel Verlag, Stuttgart, 2. überarbeitete Auflage, 2001

Food costs

Demand

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Food costs

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**Emission of
greenhouse gases**

External costs

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Fodder

**Import/
export**

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Pesticides

Consumption

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Fodder

**Plant/animal
production**



Koerber v K und Kretschmer J: Ernährung nach den vier Dimensionen. Wechselwirkungen zwischen Ernährung und Umwelt, Wirtschaft, Gesellschaft und Gesundheit. Ernährung & Medizin 21, 178-185, 2006

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Fodder

Fertilizer



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Fodder

Agricultural land

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Fodder

Pesticides



Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, de Haan C: Livestock's long shadow.
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Pesticides

Water quality

Margni M, Rossier D, Crettaz P, Jolliet O: Life cycle impact assessment of pesticides on human health and ecosystems. Agriculture, Ecosystem and Environment 93, 379-392, 2002

Fertilizer

Water quality



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Fertilizer

**Soil quality/
erosion**



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Pesticides

**Soil quality/
erosion**

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Fertilizer

**Emission of
greenhouse gases**

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**Soil quality/
erosion**

Water quality



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**Primary
energy use**

**Emission of
greenhouse gases**



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Food supply chain

**Primary
energy use**

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Food supply chain

**Emission of
greenhouse gases**



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**Plant/animal
production**

**Soil quality/
erosion**

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Environmental issues and options. FAO, Rom, 2006

**Plant/animal
production**



Water

Steinfeld H, Gerber P, Wassenaar T, Castel V, Rosales M, de Haan C: Livestock's long shadow.
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Water quality

External costs

Foodwatch (e.V. Berlin): Was kostet ein Schnitzel wirklich? - Der foodwatch-Report über falsche Preise und wahre Kosten der Fleischproduktion. Berlin, 2004

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**Soil quality/
erosion**

External costs

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**Emission of
greenhouse gases**

Health status

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Food supply chain

Food labeling



Eco-World: Vegetarische Produktkennzeichnung... Namhafte Hersteller übernehmen Vorreiterrolle. Internet:
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**Import/
export**

Transportation

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**Plant/animal
production**

**Import/
export**

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