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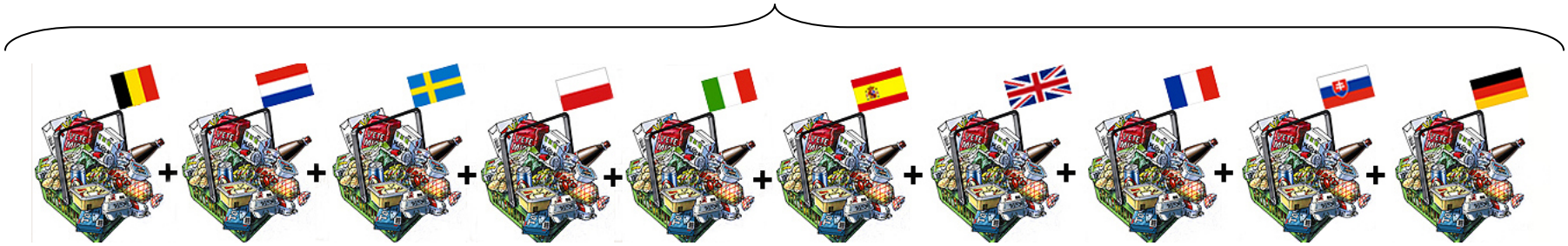
EUROPEN

# The European Shopping Baskets

*"Looking at the entire packaging system"*



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# Aim

To create a platform for a packaging dialogue based on facts, that can be used to demonstrate the complexity of existing packaging system.

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# The Outcome

1. *Demonstrate the inerrelationship between packaging system components.*
2. *Show how differences between countries influence packaging development.*
3. *Illustrate the complexity of meeting various and conflicting demands*
4. *Provide insights into Industry's efforts to support Sustainable development.*
5. *Create a platform for fact based on stakeholder dialogue.*
6. *Offer a qualitative/quantitative aid to development of packaging/waste policy.*
7. *Permit companies to bench-mark own packaging with an European average.*

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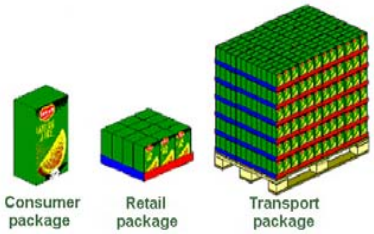
# Methodology

One <u>Shopping Basket</u> filled with the most common everyday products is studied for each country

**The whole packaging system for each product is studied.**




**The basket contains the number of articles sold per year**

12111500 0 pcs/year

4722000 pcs/year

170382 pcs/year

**Reuse is taken into account**

# Facts to be considered

## - In general

**Number of products sold /year**

**2600 x**

**1 x**

## - Spec.for reuse systems

**Number of trips**

**/15**

**/35**

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# Swedish Shopping basket

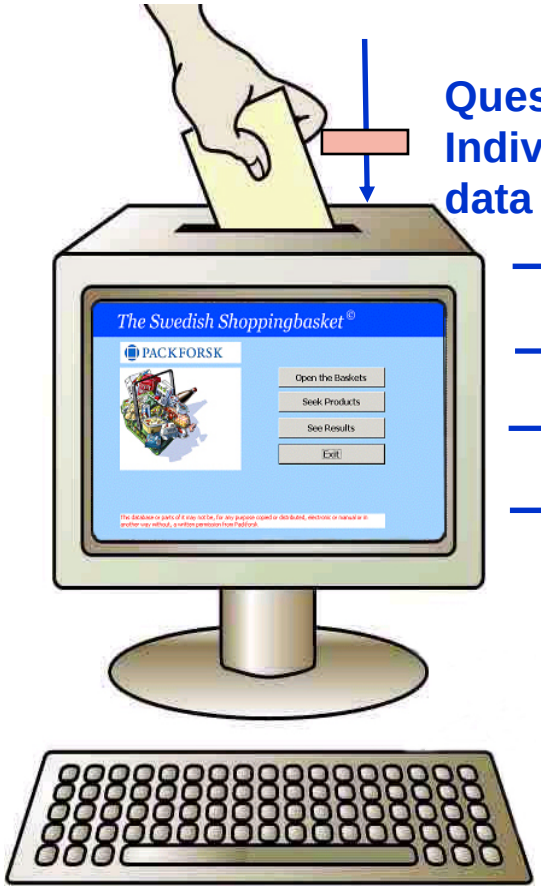
- Most common product categories identified
- Leading brand from each product category identified
- More than 1 leading brand for the large categories

# Questionnaire

**Approximately 40 questions of which the most important are:**

- **Product weight**
- **Packaging weight**
- **Packaging dimensions**
- **Packaging material components by weight**
- **Number of consumer packages in a retail package**
- **Number of retail packages per layer**
- **Number of layers**

# The Database




**Questionnaire : Individual packaging data**

**Average**

**Sum ups**

**Key-values**

**Individual packaging data**

**Security check-point controlling confidentiality and data submitted**

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# The Database

# Major areas of packaging demands i.e

**STRENGTH**
- Protect the product from physical damage
- Easy to fill

**LOGISTICS**
- Easy to handle, store & transport

**HEALTH**
- Protect the product from chemical/biological exposure

**USABILITY**
- Easy to open, hold & close
- Inform the consumer about the product

**ENVIRONMENT**
- Easy to empty
- Easy to take care of when emptied

**ECONOMY**
- Easy to manufacture and cost efficient
- Sell the product

**Producer - User - Consumer - Authorities**

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# The relation between Sociatal demands & Packaging development

## Society & Consumers

- Single person household
- Families
- Old & Handicapped
- Young
- Poor
- Rich
- Health interested
- Environmental interested
- Under stress
- Lack of time
- Living in the city
- Living in the country
- Large forest
- Extensive legalisation

**Sociatal key-values**

## Packaging

- Small sizes
- Big pack
- Easy to open & seal
- Trendy
- Cheap
- Luxurious
- Hygienic
- Environmental friendly
- Simple & durable
- Complex (ready food)
- Simple (fast food)
- Good barrier protection
- Fibre-based
- Light

**Packaging key-values**

# Social data

- *Number of inhabitants*
- *Inhabitants/km2*
- *Young people (20-35 years), Middle aged people (36-64), Old people (>65 years)*
- *Average household size, and actual household size splits with time*
- *People living in city/country*
- *Number of highly educated people*
- *GDP (GNP) per capita*
- *Number of cars per 1000 inhabitants*
- *Out of home consumption*
- *Number of products in different product category (e.g. diary, cheese)*
- *Average meal preparation time*

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# Packaging key-values

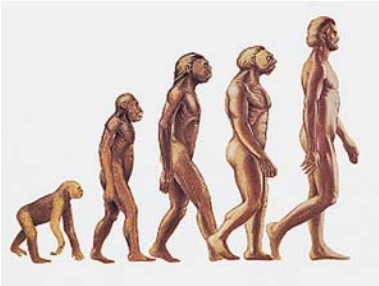
1. **Weight distribution on a pallet (%)**
2. **Packaging weight / Product weight (g/kg)**
3. **Packaging weight / Number of jobs (g/ e.g. numer of washes)**
5. **Product residue / Total product content**
4. **Reusable packaging weight / Total basket weight (%)**
6. **Product volume / Packaging volume (%)**
7. **Product damage / Total product content**
8. No packaging with additional functionallity / Tot number of packaging
9. **Total Basket weight**

# Evolution theory of packaging

**The consumers behaviour (e.g. single households) are changing all the time and the packaging must change with them.**

**The consumers need leads to the development of new products (concentrated food, grinded food, ready-food) and this can lead to new packaging.**

**The degree of packaging evolution can be measured,**



# Theory of evolution

Evolution step 1

+

=

Evolution step 2

+

=

Evolution step 3

+

=

Evolution step 4

# Evolution of the ricepudding

## Evolution step 1

**Consumer have a lot of time! Do it your self, boil it with milk!**

**Packaging weight**
**Product weight**

**9,9 g/kg**

**0,5 g /portion**

**Packaging weight**
**Product price**

**5,07 g/Euro**

## Evolution step 2

**Consumer needs little help! Poor it up and warm it in the micro!**

**Packaging weight**
**Product weight**

**11,8 g/kg**

**5,9 g/portion**

**Packaging weight**
**Product price**

**6,85 g/Euro**

## Evolution step 4

**Consumer on the go and very stressed! Everything ready! just eat!**

**Packaging weight**
**Product weight**

**75,4 g/kg**

**37,3 g/portion**

**Packaging weight**
**Product price**

**12,7 g/Euro**

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# The Swedish Shopping Baskets

# Participating companies

A/S Saeby Fiske-Industri
Abba Seafood
Adaco
Akzo Nobel Chemikals
Annas Pepparkakor Production

Arla Foods
Arla Ost & Smör
Arla Semper
Arvid Nordquist
Beiersdorf
Bestfoods Nordic
Cederroth
Che-Be Trading
Coca-Cola
Colgate-Palmolive
CPC Foods
Dafgård
Danisco Sugar
Dare Foods Ltd, Tubbin & Melander
Duni & Melitta
Estrella
Findus Sverige
Frödinge Mejeri (Arla)
GB Glace
Gillebagaren
Gripen
Göteborgskex
Henkel Sweden
Herrljunga Cider
ICA Handlarnas
Jästbolaget
KA Lundblad
Kellogs
KF
Kraft Freia Marabou
Kronfågel
Kronägg ek.för
Kungsörnen
Lever Fabergé
Lysekils havsdelikatesser
MalacoLeaf Sverige
Masters Foods
Mellita scandinavian
Metsä Tissue
Nordfalks
O Kavli
Osram
Pandalus
Pastejköket
Perstorp
Philips Morris
PrippsBryggerier
Procordia Food
Procter &Gamble
Pågen
RFSU
Roddfi Mansueto SpA, Parma
Rosenlew emballage
Samfood
SCA Hyginen products
Scan Foods
Semper Foods
Skogaholms bröd
Skultuna Folie
Stenqvist
Swegro/stenqvist
Svenska Nestlé
Tholstrup Pastella A/S
TiFood
Van Den Bergh Foods
Wasabröd
Wella
Winborgs
Wrigley Scandinavia

# Weight:

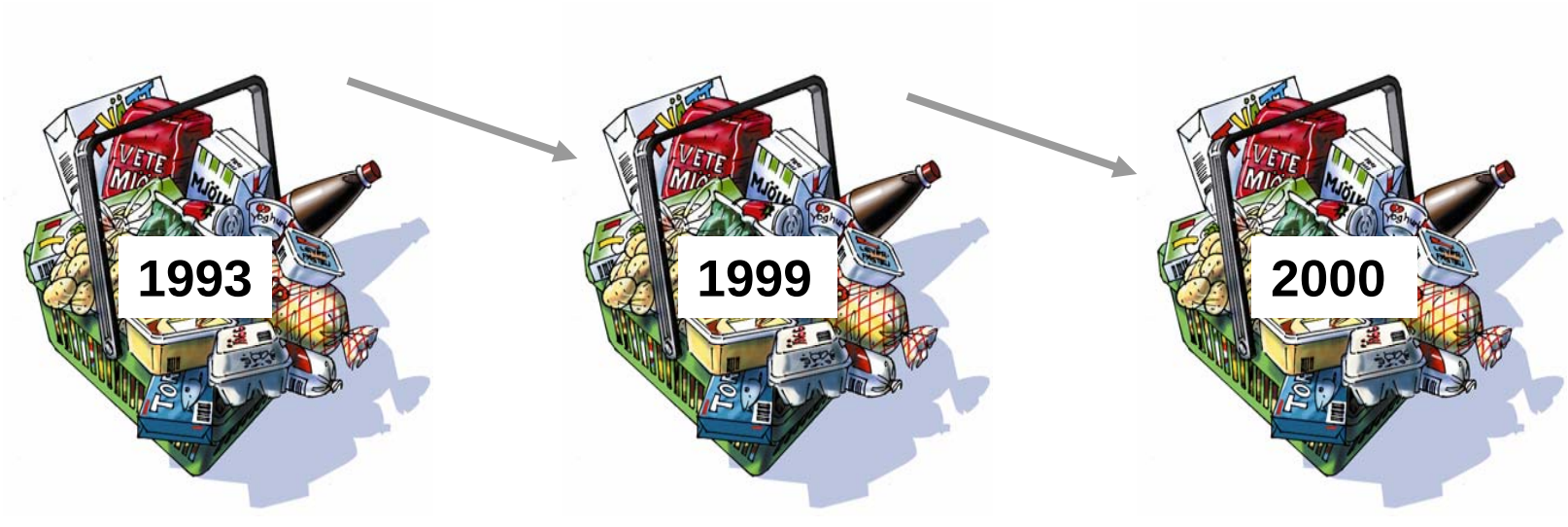
## Changes by weight 1993-2000

**- 17 %**

**( ~ 4000 tonnes)**

**- 0,5 %**

**(~ 60 tonnes)**




***Note: The basket contents are identical to 90 %***

# System:

## Changes by weight 1993-2000

**C-pack: - 15,7 %**

**R-pack: - 1,5 %**

**T-pack: + 0,2 %**

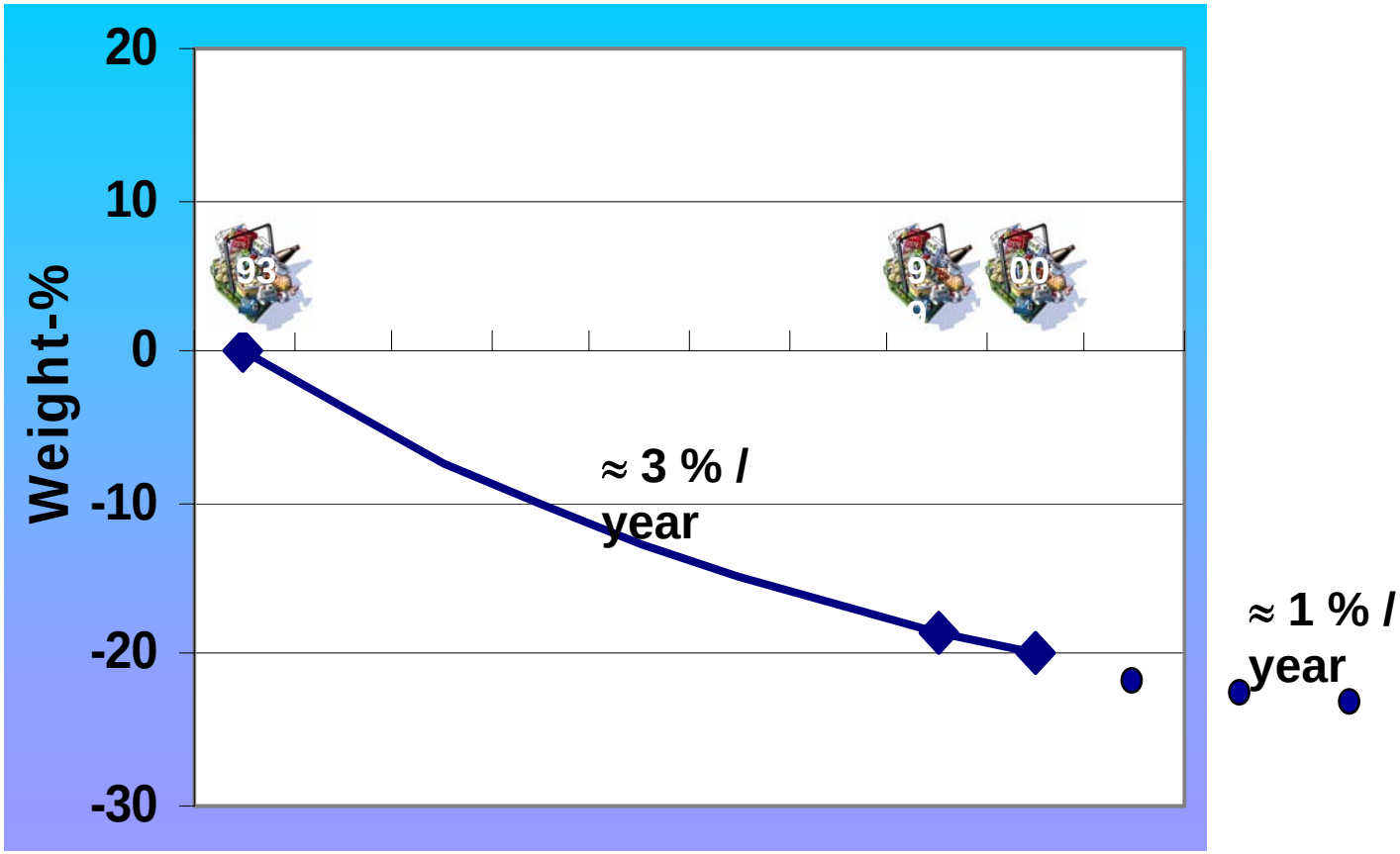
**C-pack: - 0,2 %**

**R-pack: - 0,3 %**

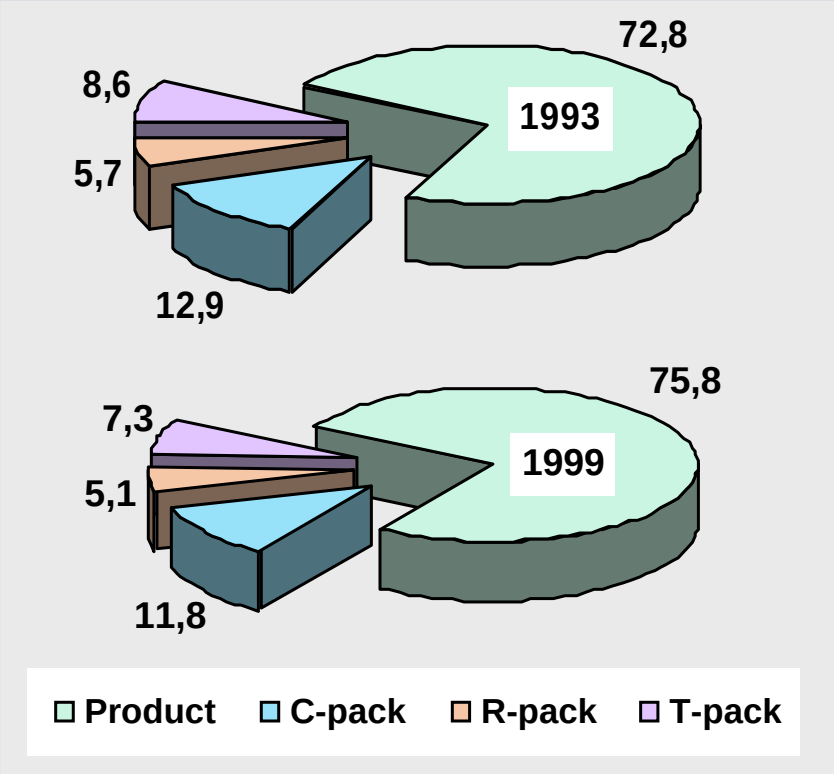
**T-pack: + 0,02 %**

# Packaging development in Sweden

**1993-2000**



# Weight distribution Packaging - Product



* A tertiary packaging (Euro-pallet) is studied

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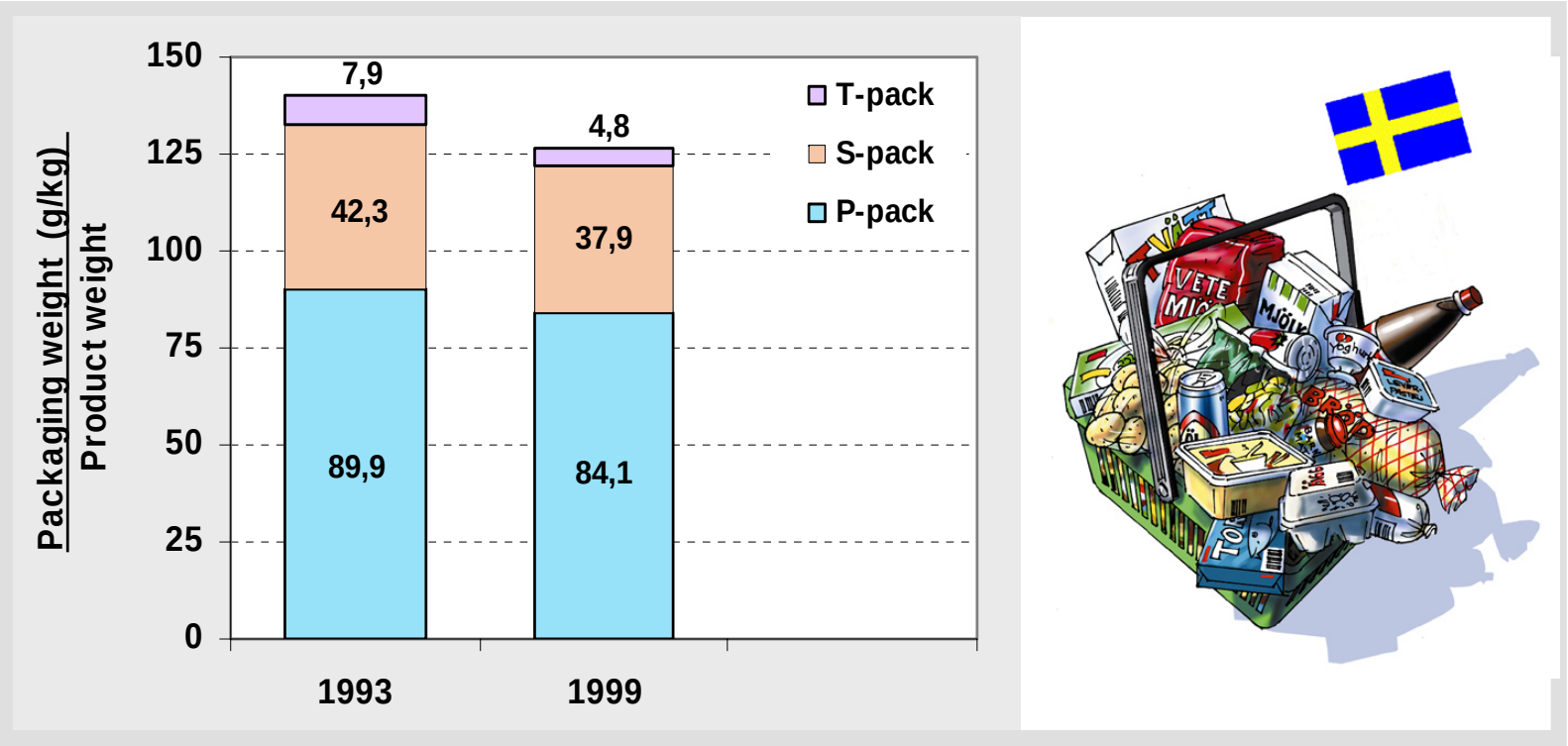
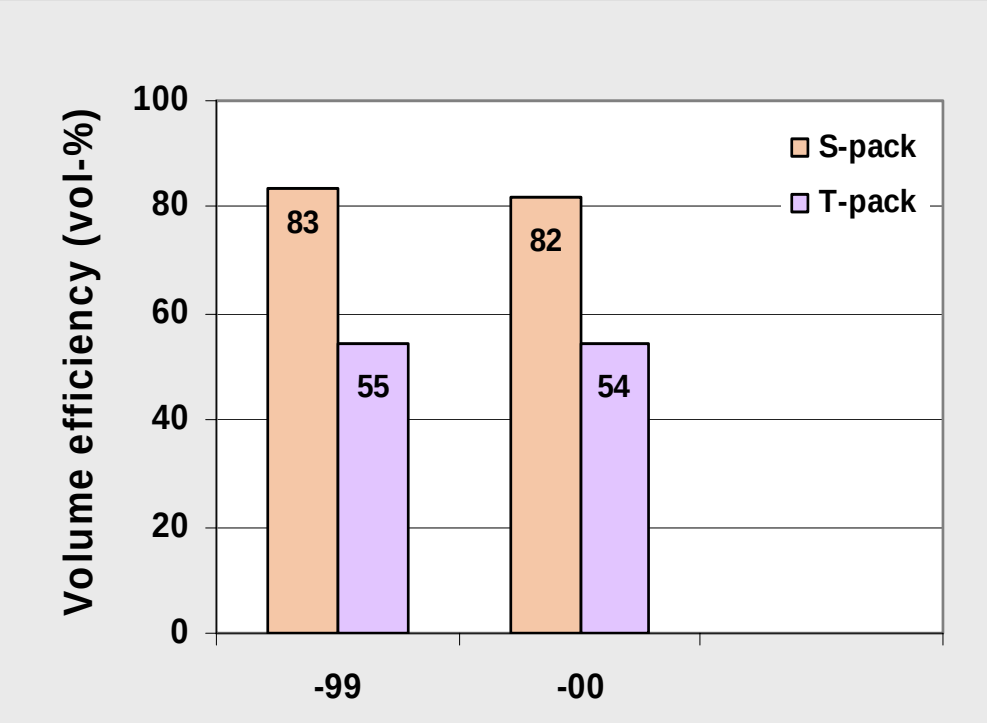
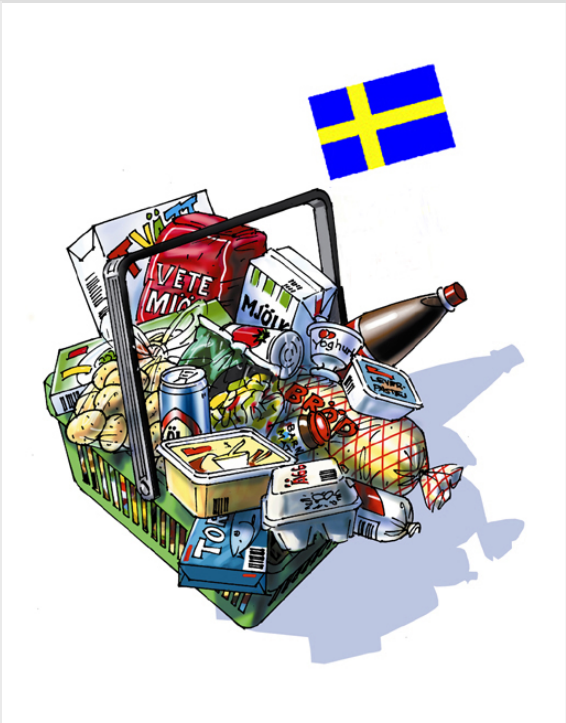
# Packaging weight / Product weight - g/kg



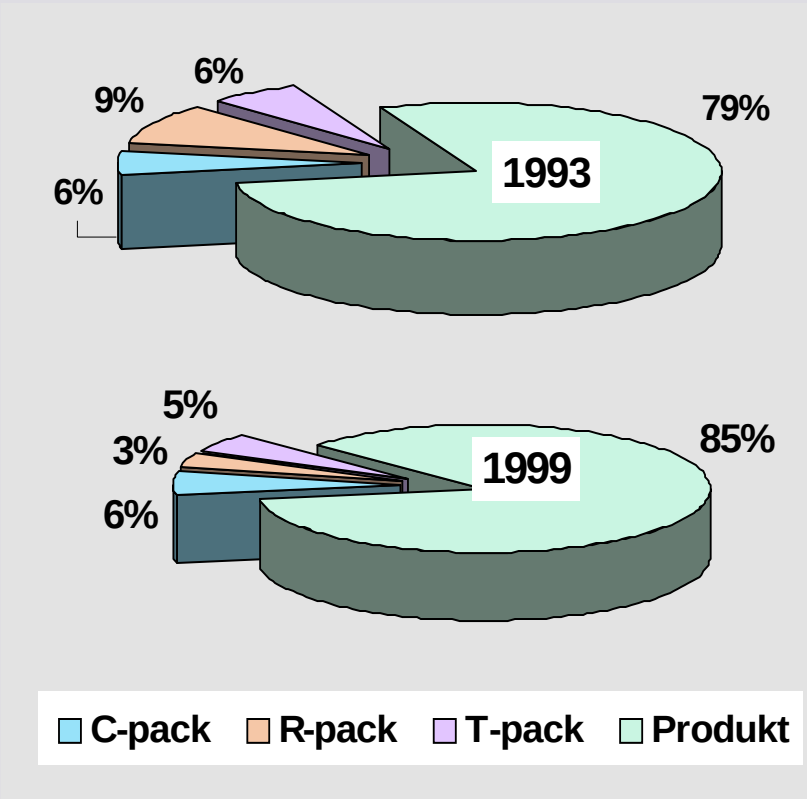

* Consideration taken to reuse

# Volume efficiency - vol-%



# Weight distribution  packaging-product



* One Transport package studied (reuse not included)

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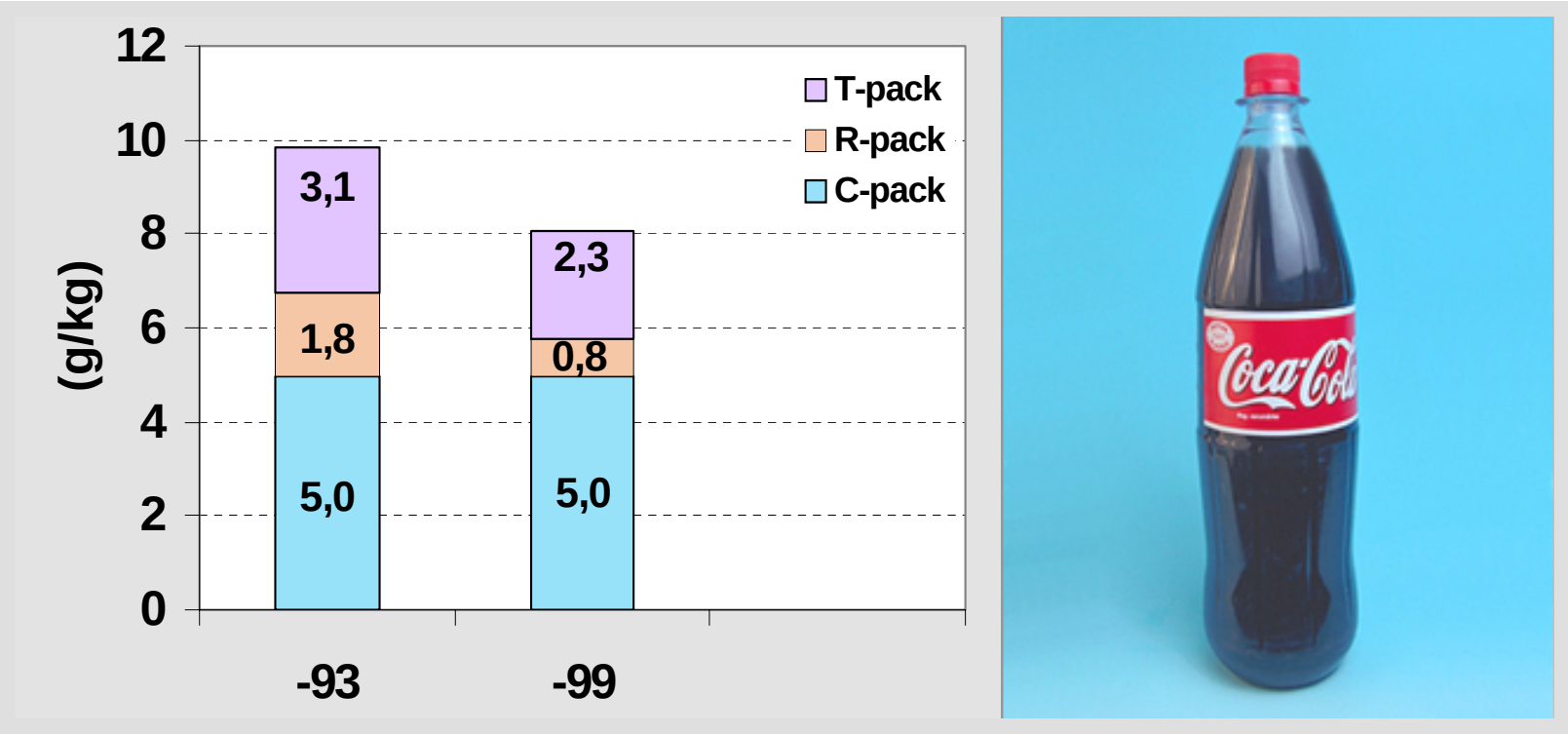
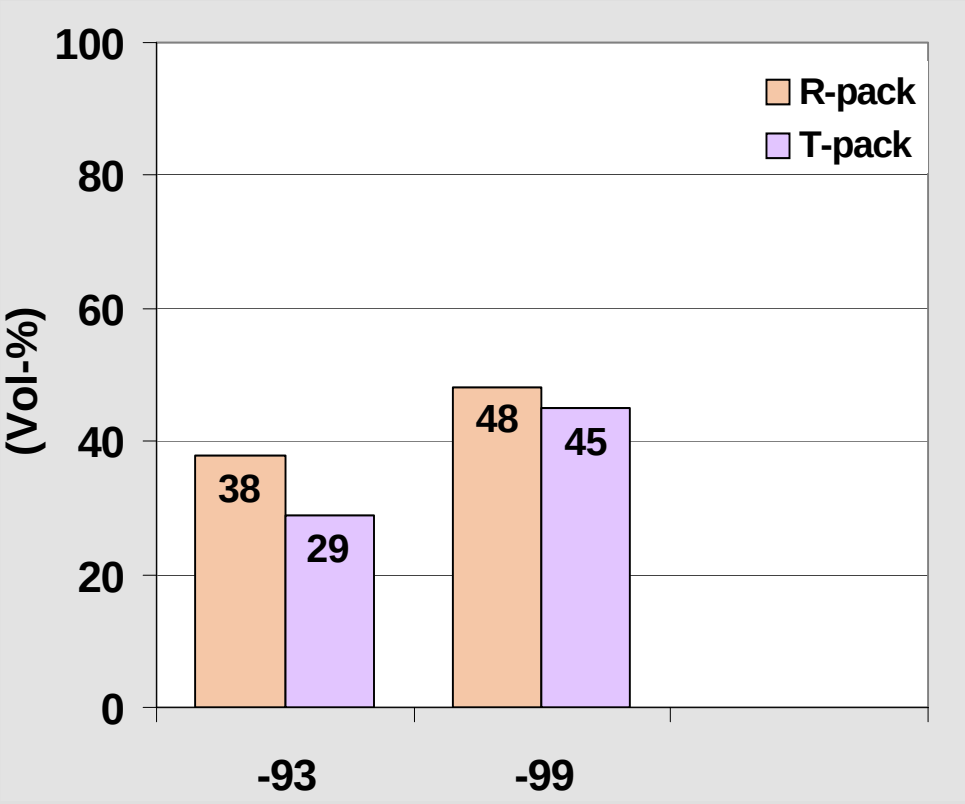
# Packaging weight / Product weight - g/kg




* Reuse included

# Volume efficiency - vol-%



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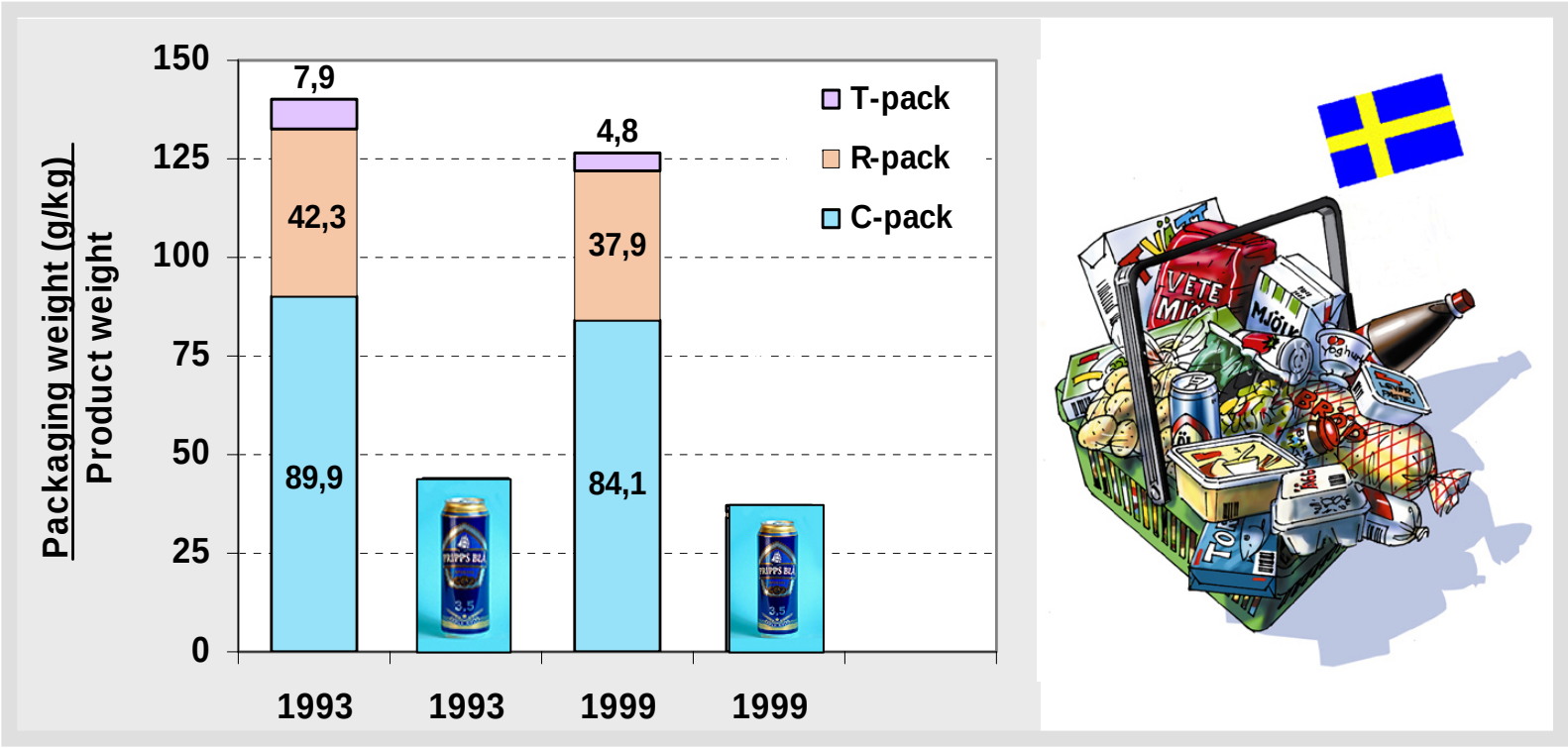
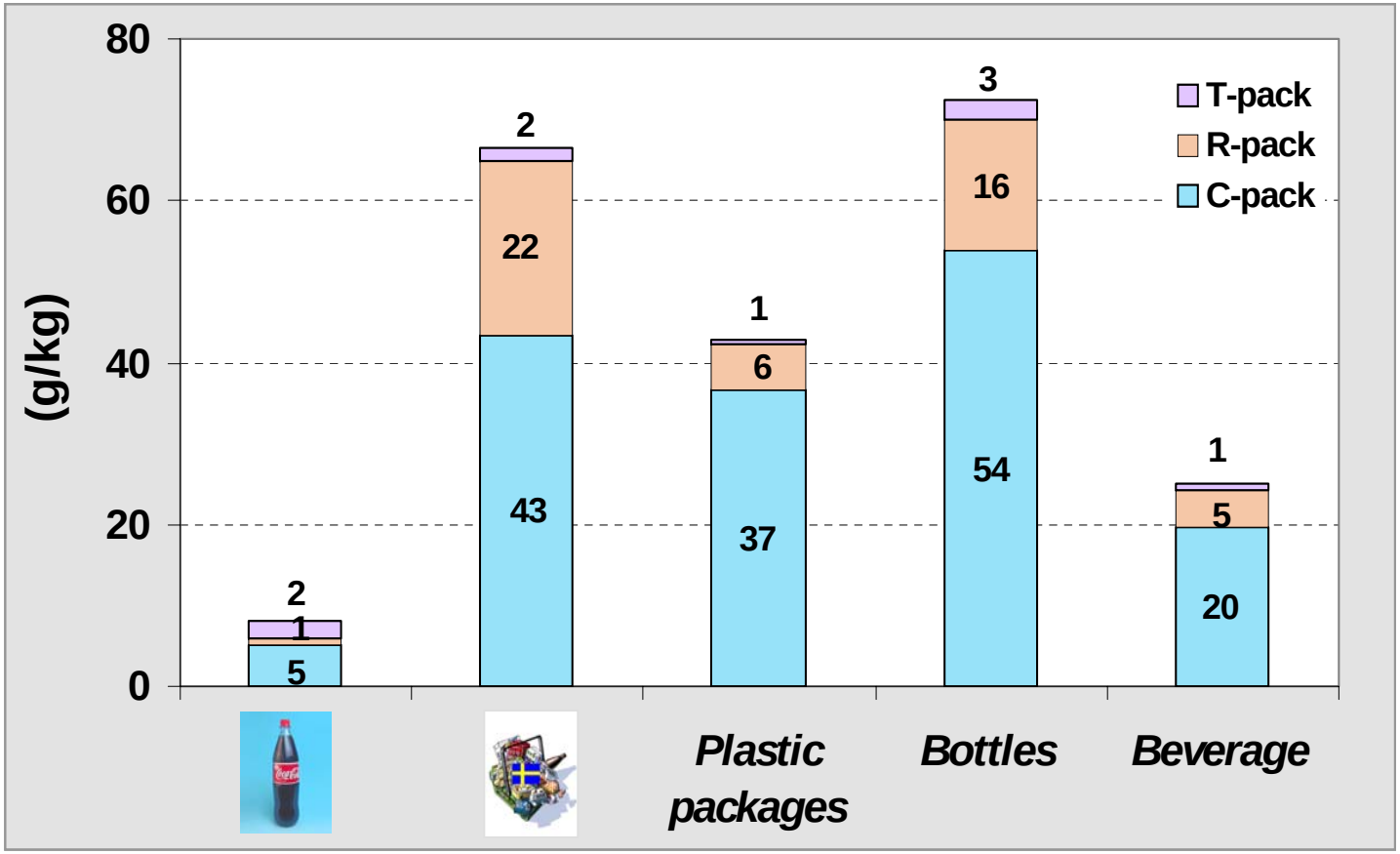
# Packaging weight / Product weight - g/kg




* Consideration taken to reuse

# Package weight/product weight - g/kg



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# The Swedish/Polish Shopping Baskets

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# Swedish/Polish Shopping basket

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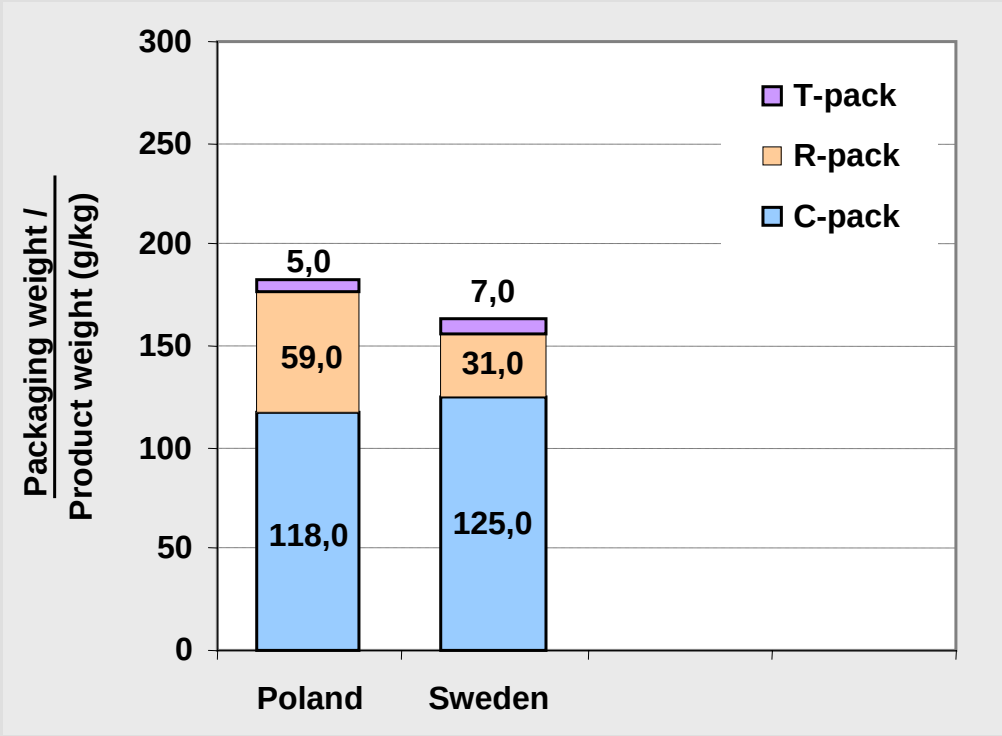
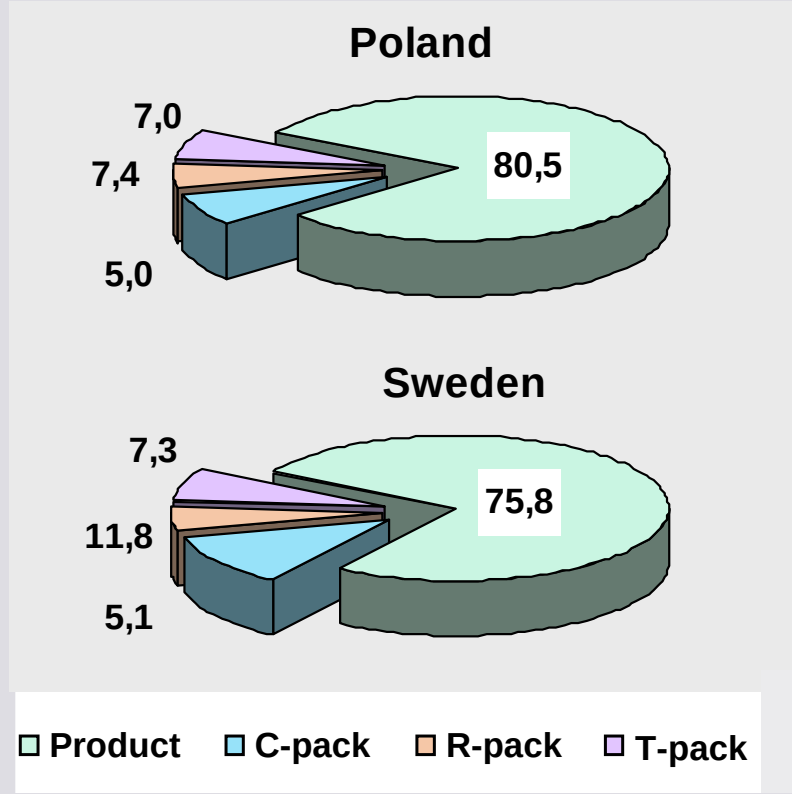
# Packaging weight / Product weight - g/kg



* Consideration taken to reuse

# Weight distribution Packaging - Product



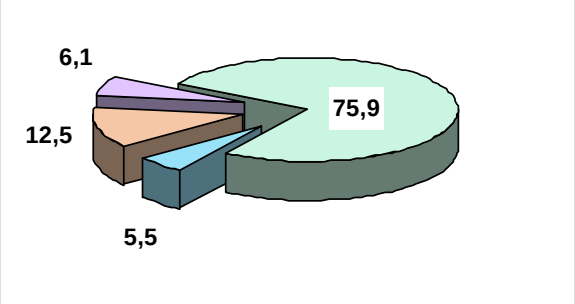
* A tertiary packaging (Euro-pallet) is studied

# Eggs

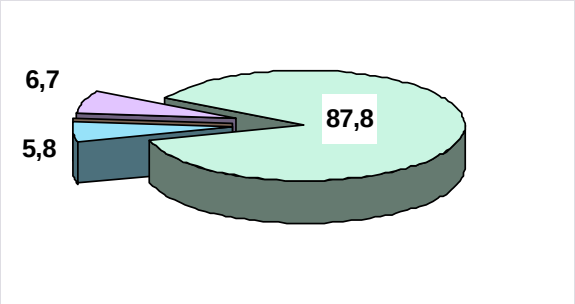
**Weight distribution on a pallet**

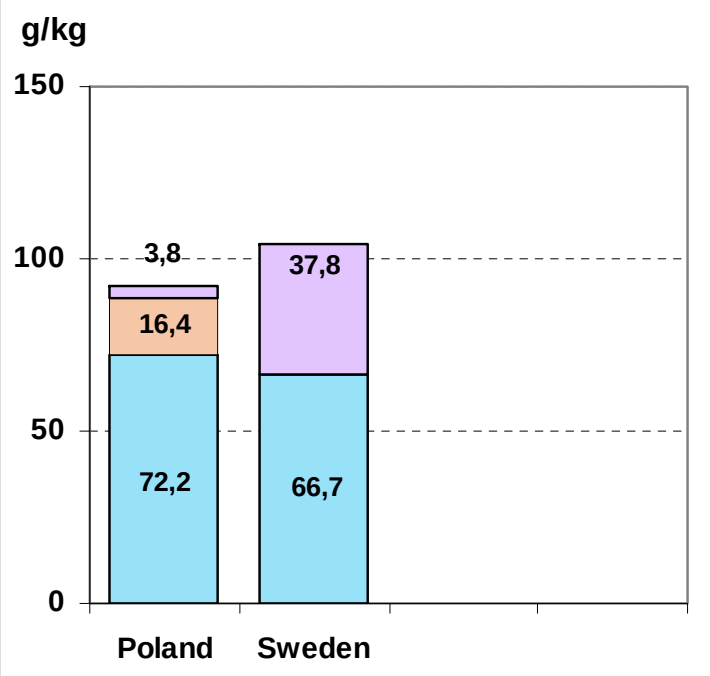
**Packaging weight / product weight (g/kg)**

**Poland**




**Sweden**



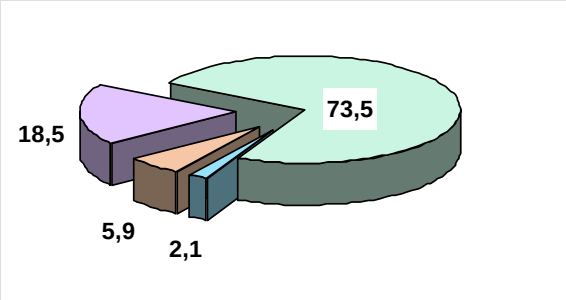

Product C-pack R-pack T-pack

# Corn Flakes

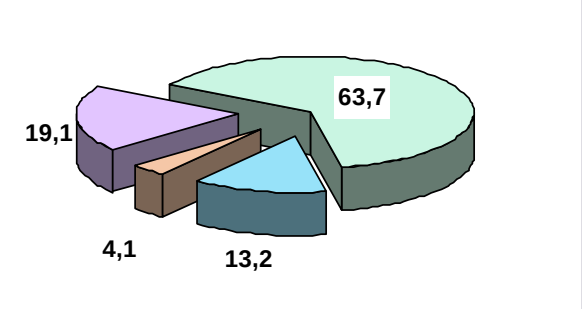
**Weight distribution on a pallet**

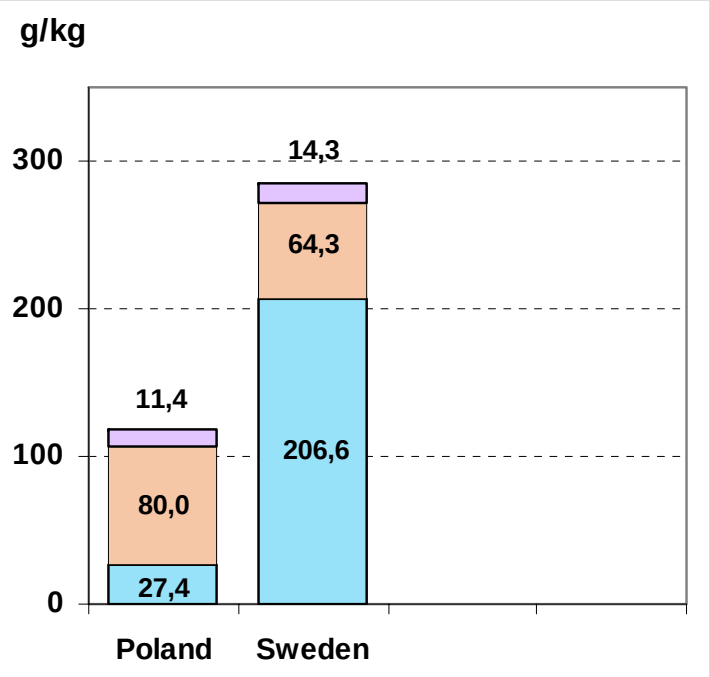
**Packaging weight / product weight (g/kg)**

**Poland**




**Sweden**



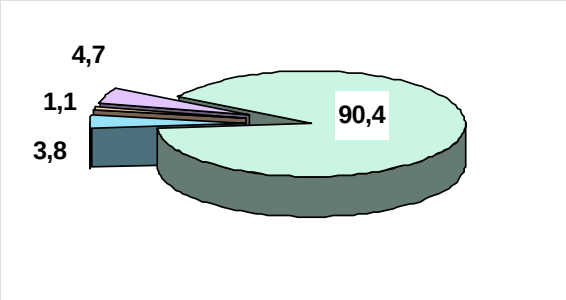

Product C-pack R-pack T-pack

# Coffee

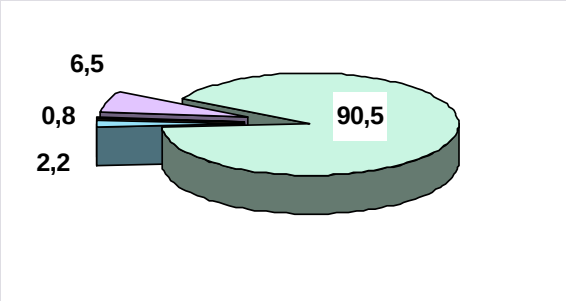
**Weight distribution on a pallet**

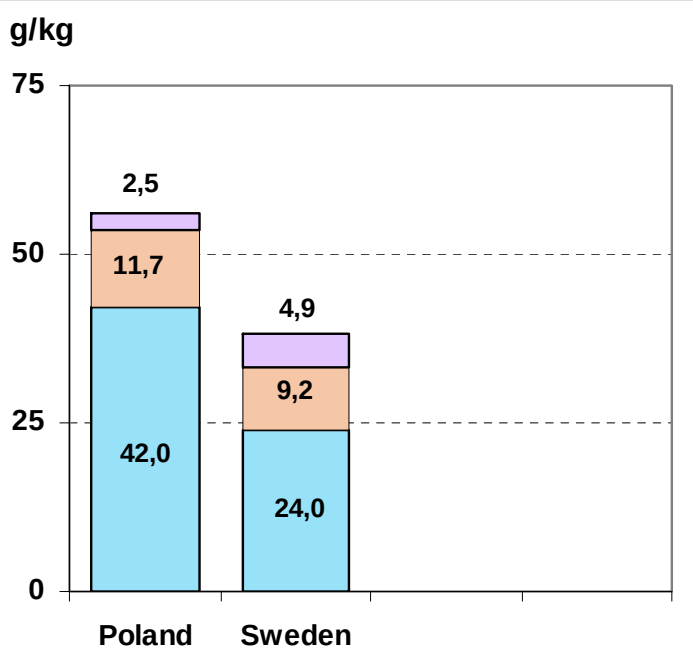
**Packaging weight / product weight (g/kg)**

**Poland**




**Sweden**



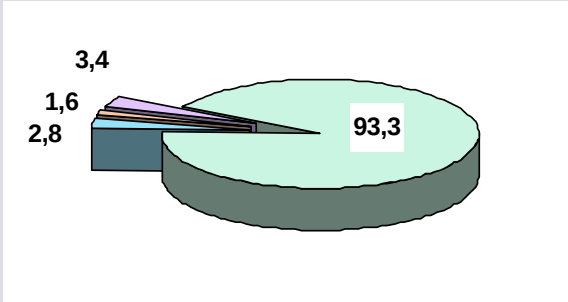

Product C-pack R-pack T-pack

# Milk

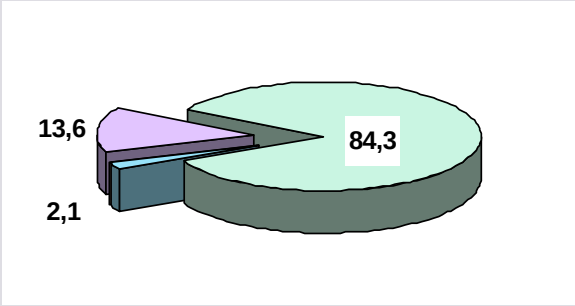
**Weight distribution on a pallet**

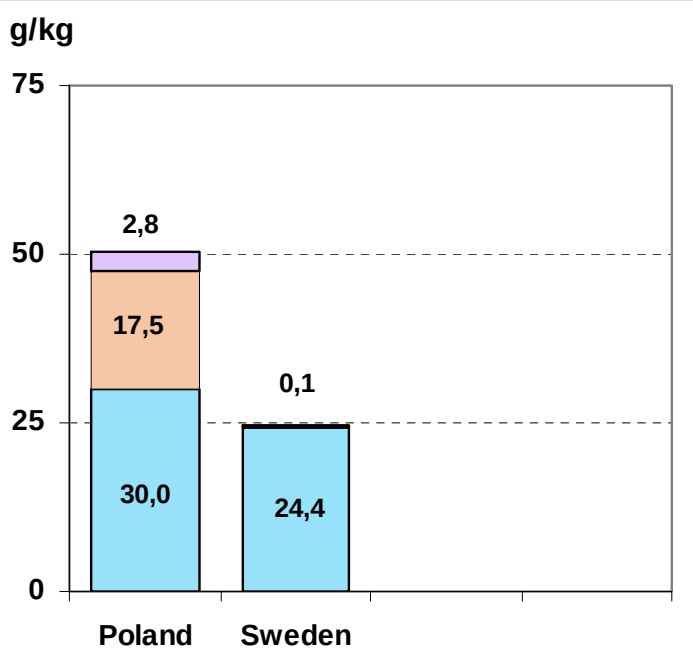
**Packaging weight / product weight (g/kg)**

**Poland**




**Sweden**



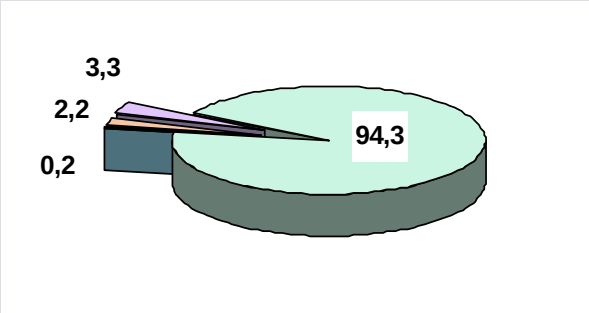

Product C-pack R-pack T-pack

# Coca Cola

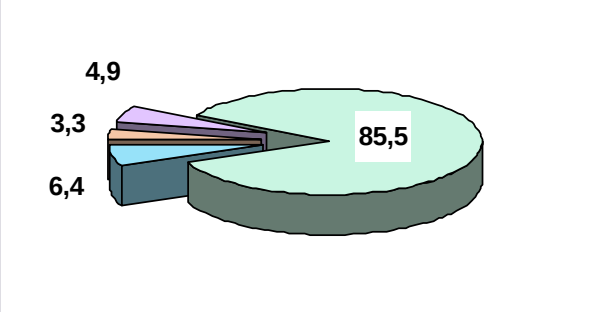
**Weight distribution on a pallet**

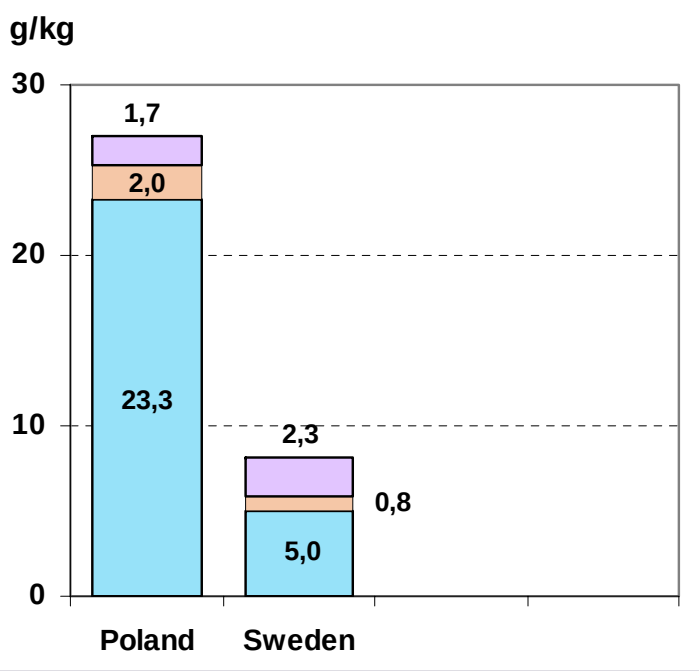
**Packaging weight / product weight (g/kg)**

**Poland**




**Sweden**



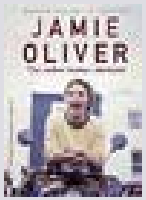

Product C-pack R-pack T-pack

# *The European Baskets trends*

# Cooking - in old times and now

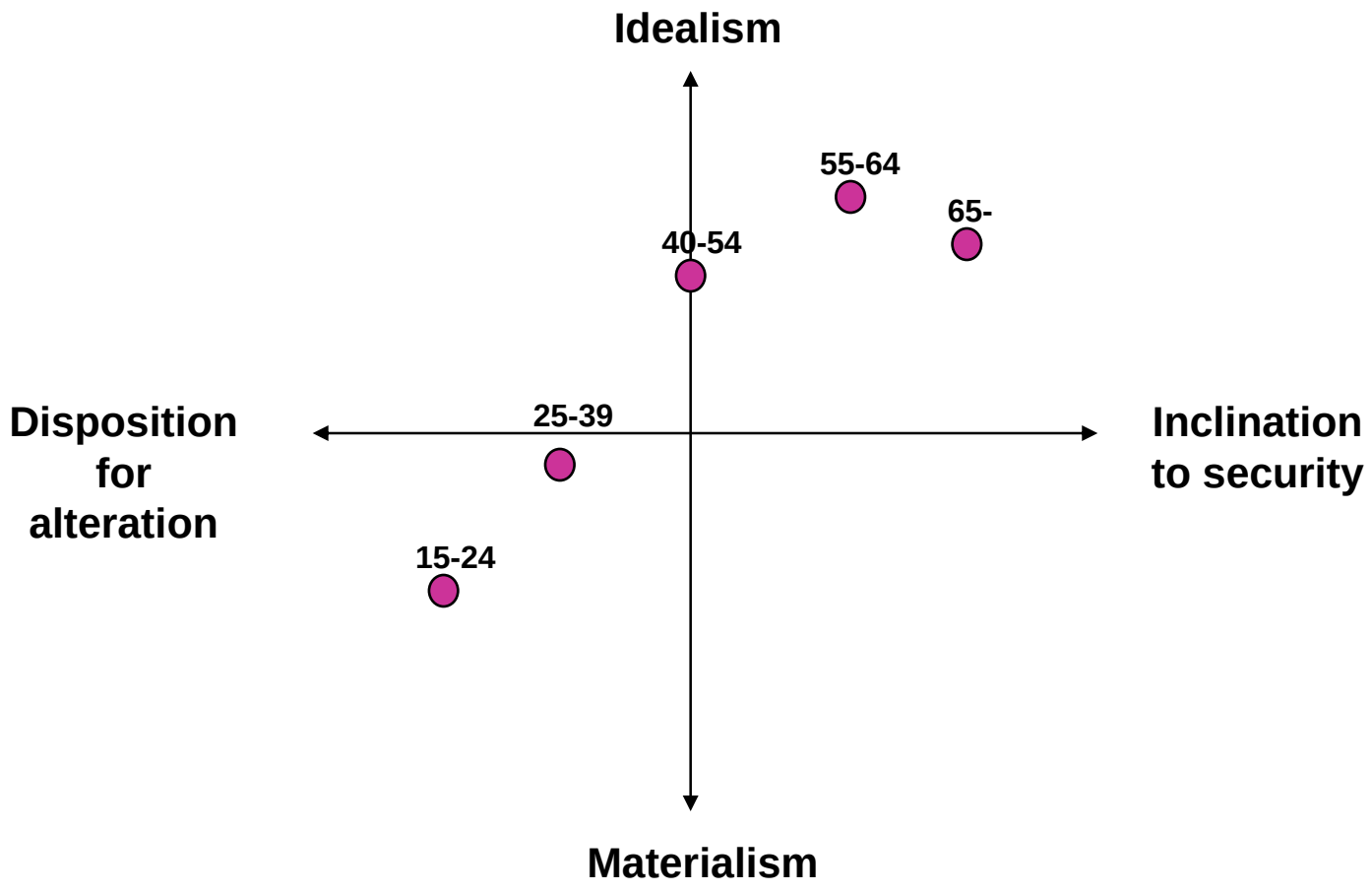
1954

2002

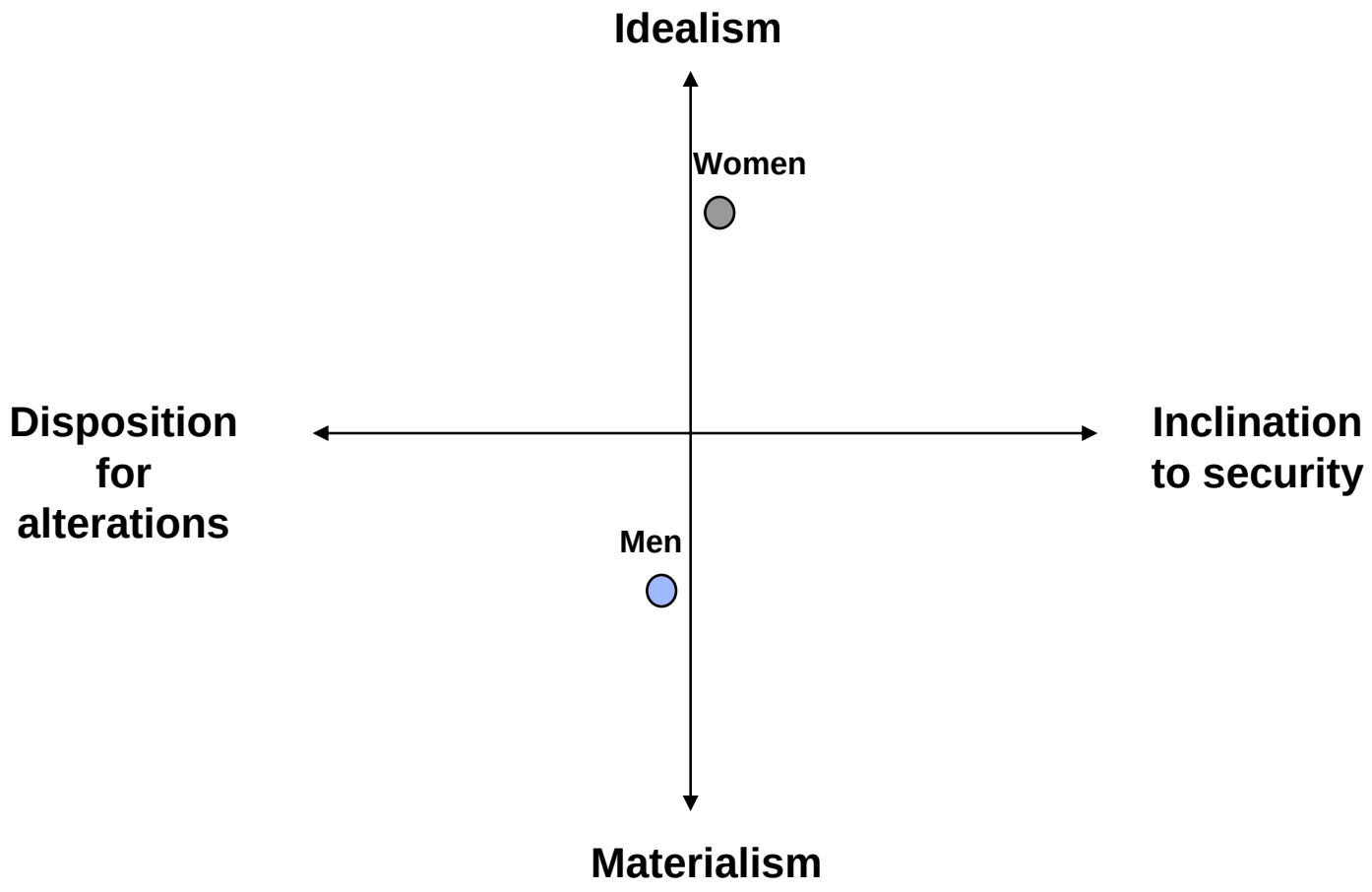


# The shop - in old times and now

# Set of values and life-style



# Set of values and life-style



# Trends

* Less time is used for making daily meals

  (time used today 12-16 min, in USA 8 min)

* On week-ends we make the gourmet food.

* Consumers are today are more fragmented into categories

  (situasider instead of individuals)

* Influences from foreign countries (exotic tastes)

* More single housholds, more elderly people

* We take more spontaneous decisions without planning.

  (>60% do not know what to eat for supper before visiting a shop. They decide what to have within 30 sek. We manage mentally to control only 7±2 items at the same time)

# Trends

**The packaging and the product are very closely related**

***A luxeriuos products demands luxerious packaging***

***A simple product demands simple packaging***

***A cheap product demands cheap packaging etc…***

**It is important to follow the development in the society!!**

**Which are the products in the future**

# Trends

**We live in an experience society!**

*”In the factory we make cosmetic. In the shop we sell hope”*

**The packaging should not only protect the product!**

**The packaging is a strategic tool!**

**Cooking of food = Open the packaging**