

# KARLSTAD, A PART OF THE SWEDISH MODEL



KARLSTAD.SE





## **KARLSTAD**

- 100 000 inhabitants.
- 35 production kitchens.
- 150 chefs.
- 7 million euros in food purchases.
- 10% locally produced.
- 35% organic foods.





## EDUCATION

- Basic education from school 3 years.
- Restaurant experience 3 years.
- Further education is individual (special diet, vegetarian, climate smart).
- Joint training, often in "workshops" around a given produce.





## THE “SWEDISH MODEL”





## RANGE AND BUDGET

- 433796 portions (2022) distributed among 3 high schools.
- We always serve 2 dishes, 1 dish is vegetarian.
- Salad buffet.
- Bread, often home-baked and milk/water.
- 478 euros per year/student = 2.6 euros per student/day.
- 80% of students eat in the school restaurant.
- 5.80 euros total portion cost.
- 2.10 euros for food costs.







The school lunch is the students' most important lesson of the day.

# THE SHWEDISH SCHOOL LAW (2010:800)

## Elementary school

- Charges
- Section 10 § The education must be free of charge.
- The students must have free access to books and other learning tools needed for an up-to-date education **and be offered nutritious school meals.**

## High School

- Charges
- 17 § The high school education must be free of charge.
- The students must have free access to books and other learning tools needed for an up-to-date education.





## **LIVSMEDELSVERKET – A NATIONAL RECOMMENDATION PLATFORM**

- The meal as a whole
- Focus on the diner
- Invest in knowledge and competence





# DIETARY ADVICE

- More vegetables, fruit and berries, fish and shellfish, nuts and seeds, exercise in everyday life.
- Less red meat and charcuterie, salt, sugar, alcohol.
- Switch
  - White flour to whole grain
  - Butter-based fats to plant-based fats
  - Fatty dairy products to lean

## Livsmedelsverkets generella kostråd

Bilden nedan är en sammanfattning av Livsmedelsverkets kostråd *Hitta ditt sätt – att äta grönare, lagom mycket och röra på dig*. Dessa råd är grunden även för skolans mat, men observera att på grund av risk för allvarliga allergiska reaktioner bör nötter och vissa frön inte ingå i maten i skolan och självklart inte alkohol över huvudtaget.



### MER

Grönsaker, frukt och bär  
Fisk och skaldjur  
Nötter och frön  
Rörelse i vardagen



### BYT

Vitt mjöl  
Smörbaserade  
matfetter  
Feta mejeri-  
produkter

### TILL

Fullkorn  
Växtbaserade  
matfetter och oljor  
Magra mejeri-  
produkter



### MINDRE

Rött kött och chark  
Salt  
Socker  
Alkohol





# ”TALLRIKSMODELLEN”

The carbohydrate part and the fiber part should be about 40 percent each and the protein should be about 20 percent.

Cereal, bread, bulgur, whole grain potatoes, semolina, pasta, rice.

Onions, cauliflower, broccoli, vegetables, root vegetables, carrots, spinach, cabbage.

Fish, meat, eggs, beans, tofu, lentils, shellfish, chicken.



## Recommendation

- Fatty fish, at least once a week.
- Salad buffet with at least five different components.
- At least one fruit every day.



Reference values for energy and nutrient content 30% of recommended daily intake.

The schools work with nutritional calculation programs that are based on recipes.



Ålder (år)		6–9	10–12	13–15	16–18
<b>Energi per portion (MJ)</b>	30 % av RI (25–35 %)	2,1 (1,7–2,4)	2,7 (2,2–3,1)	3,1 (2,5–3,6)	3,3 (2,7–3,8)
<b>Energi per portion (kcal)</b>	30 % av RI (25–35 %)	500 (415–580)	645 (535–750)	735 (610–855)	790 (655–920)
<b>Fett (25–40 E%) (g)</b>		14–22	18–29	21–33	22–36
Mättat fett och transfett (max 10 E%) (g)	högst	6	7	8	9
Fleromättat fett (5–10 E%) (g)		3–6	4–7	4–8	4–9
<b>Kolhydrater (45–60 E%) (g)</b>		55–73	71–95	81–108	87–116
<b>Protein (10–20 E%) (g)</b>		12–24	16–32	18–36	19–39
<b>Fibrer (g)</b>		6	8	9	10
<b>Vitamin C (mg)</b>		12	15	23	23
<b>Vitamin D (µg)</b>		3,0	3,0	3,0	3,0
<b>Folat (µg)</b>		39	60	90	120
<b>Järn (mg)</b>		2,7	3,3	4,5	4,5
<b>Salt (g)</b>	högst*	1,2	1,8	1,8	1,8







## KOSTPOLICY

GYMNASIE – OCH  
VUXENUTBILDNINGSFÖRVALTNINGEN



## LOCAL GOVERNING DOCUMENTS

- Public documents.
- Food policy which governs procurement
- Local dietary policy that governs the food served.



# MENU

34	V Vegetariskt strogonoff med D 1 stekt korv med tomatsalsa c D 2 kockarnas val	V Spenatsticks med ajarcren D 1 kebabgryta med ris D 2 kockarnas val	V Chili sin carne med bulgur D 1 Kycklingbiffar med rödcurry: D 2 kockarnas val	V Falafel i libabröd med yoghu D 1 apelsin och sweetchili bakad D 2 kockarnas val	V Spenatlasagne D 1 Köttfärschilli med nachochip D 2 kockarnas val
	28 aug	29 aug	30 aug	31 aug	01 sep
35	V Vegetarisk moussaka D 1 Stekt panerad sej med lime: D 2 kockarnas val	V Zuccinipläggat med polenta, D 1 Köttbullar med potatismos 8 D 2 kockarnas val	V Mexicansk bönhilli med pas D 1 Mangokyckling med rostad D 2 kockarnas val	V vego fajita med ris och tortill D 1 pasta carbonara D 2 kockarnas val	V bovetebiffar med citronsås c D 1 Pulled pork med klyftpotatis D 2 kockarnas val
	04 sep	05 sep	06 sep	07 sep	08 sep
36	V Ärtbiff med rotsakspytt och D 1 Stekt falukorv med stuvade D 2 kockarnas val	V Vegetarisk lasagne D 1 örtgratinerad fisk med potati D 2 kockarnas val	V Falafel med Taboulehshallad D 1 Cajun kyckling med ris D 2 kockarnas val	V Tacobuffé D 1 Tacobuffé D 2 kockarnas val	V Nasi goreng på havreris D 1 Pasta med kyckling i currys: D 2 kockarnas val
	11 sep	12 sep	13 sep	14 sep	15 sep
37	V Rödbetsbiffar med pepparot D 1 Spaghetti Bolognese D 2 kockarnas val	V selleripicatta med pasta och D 1 fiskgratäng med örtslungad D 2 kockarnas val	V Sojastroganoff med fullkorn D 1 Kycklinglasagne D 2 kockarnas val	V currykryddad vitkålsalj med D 1 Raggmunk med stekt fläsk s D 2 kockarnas val	V Citronpanerade zucchini, bov D 1 kebabwok med kall vitlöksa: D 2 kockarnas val

8 weeks rolling.

The third dish is decided by the kitchen manager.



**WE HAVE CHALLENGES TO WORK WITH**





# FOOD WASTE

Elever							Köket				Produktion		
kastat mat i gr	antal ätande	gram per elev	snitt	utthick		Lijnen	gram				i kg	gram	snitt
						i kg	per elev	snitt			i kg	per elev	
dag 1	22000	614	35,8	35,8	7	dag 1	3	4,9	4,9	dag 1	3	4,9	4,9
dag 2	22000	585	37,6	36,7	1	dag 2	3	5,1	5,0	dag 2	6	10,3	7,6
dag 3	26000	567	45,9	39,8	1,2	dag 3	5	8,8	6,3	dag 3	6	10,6	8,6
dag 4	26000	666	39,0	39,6	0,5	dag 4	11	16,5	8,8	dag 4	5	7,5	8,3
dag 5	23000	494	46,6	41,0	7	dag 5	2	4,0	7,9	dag 5	5,5	11,1	8,9
dag 6	25000	549	45,5	41,7	0,5	dag 6	2	3,6	7,2	dag 6	6	10,9	9,2
dag 7	24000	766	31,3	40,3	0	dag 7	12	15,7	8,4	dag 7	4	5,2	8,6
dag 8	20000	612	32,7	39,3	2	dag 8	5	8,2	8,4	dag 8	4,5	7,4	8,5
dag 9	38000	632	60,1	41,6	0,5	dag 9	4,5	7,1	8,2	dag 9	5	7,9	8,4
dag 10	31000	595	52,1	42,7	5	dag 10	4	6,7	8,1	dag 10	6	10,1	8,6
dag 11	25000	699	35,8	42,0	4	dag 11	3	4,3	7,7	dag 11	6	8,6	8,6
dag 12	22000	531	41,4	42,0	4	dag 12	6	11,3	8,0	dag 12	6	11,3	8,8
dag 13	29000	632	45,9	42,3	0,5	dag 13	4	6,3	7,9	dag 13	5,5	8,7	8,8



Number of portions served: 418612  
 Amount of food thrown away: 22409 kilos  
 Grams per student: 53.5





## THE SWEDISH MODEL

- Municipalities do procurement for all schools.
- Lou.
- The procurement authority provides useful criteria and advice.
- "Ramavtal" is 4 years.
- Procurement is usually divided into "baskets" such as dairy, fruit and vegetables, frozen or colonial goods.





# PROCUREMENT OF "NÄRA MAT"





## THE PROCUREMENT

- As simple material as possible.
- As few documents as possible at the time of tendering.
- "Tender School".





## **AIM AND PUPOSE OF THE PROCUREMENT**

The aim of the agreement is to

- enable the municipality to buy food with a clear origin and educational added value.
- strengthen the relationship between local food producers, the municipality's meal staff and diners.
- contribute to increased knowledge and awareness of the production and use of commodities, which also results in reduced food waste.

The purpose of the agreement is to make it easier for smaller producers to deliver to the municipality.



# HOW DOES IT WORK IN PRACTICE?







## **NOT JUST A PRODUCE**

- A produce connected to a service.
- Networking: the producer, the chef, the guest.
  - A group has been created to facilitate cooperation.
- Study visits and activities
  - At least 4 hours per year.
  - Travel time maximum 4 hours per occasion.
  - Requirements for cooperation regarding products during the contract period.





## THE AGREEMENTS

- 2 years for producers.
- 4 years for logisticians
- The price is fixed for 1 year.
- The municipality owns the contracts with the producers.
- The coordinator receives a mark-up depending on the commodity group.
- The coordinator is responsible for the web shop, purchasing, co-packing and co-distribution.

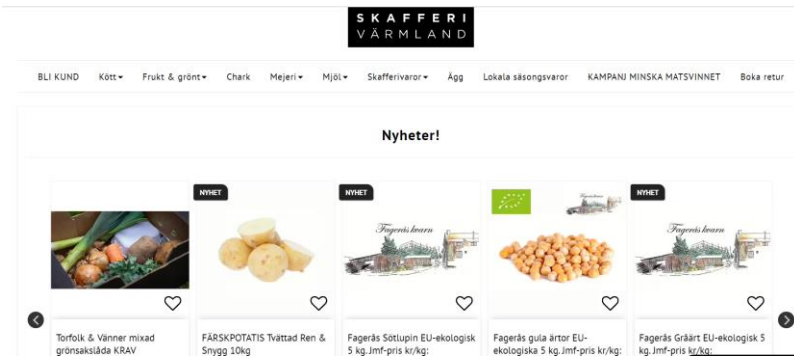




## AMBASSADORS

- A small group of interested chefs representing the entire municipality.
- Each ambassador gets a segment to work with (dairy, meat, game etc.).
- The ambassador has contacts with all suppliers in that segment.
- The ambassador has contacts with all the chefs in the municipality precisely for these products.
- Ambassador works with producers to develop new products.





## COORDINATOR

- Have all purchased goods in the webshop
- Buys goods that every kitchen orders in the web shop.
- Stores goods with a longer shelf life
- Co-pack and customer pack
- Deliver all products at one time.
- All statistics in one place.





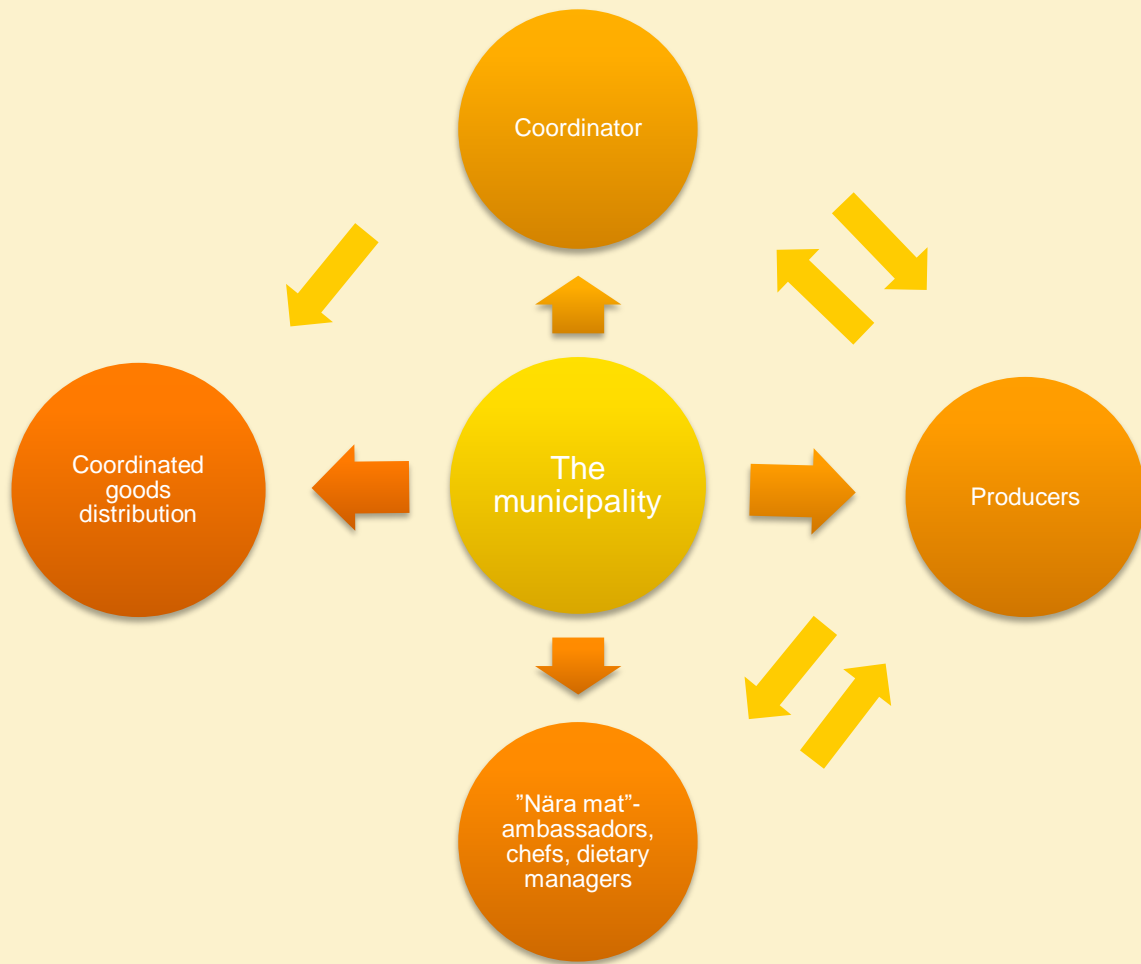


## AGREEMENT AREAS

- Pantry
  - Flour, jam, dried mushrooms, rapeseed oil, buckwheat
- Seasonal vegetables
- Potatoes, root vegetables, vegetables and fresh mushrooms
- Fresh meat and charcuterie
- Dairy and eggs

The coordinator is responsible for purchasing procured goods and products as well as stocking and distributing to the municipality's coordinated goods distribution center.







## CHALLENGES WITH PROCUREMENT

- Requires extensive dialogue with the industry.
- What is locally produced food?
- How can we ensure locally produced food?
- Get the producers to submit tenders.





**QUESTIONS?**







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