

Swedish Supermarkets and the Promotion of Meat

SUPERLIST SWEDEN ENVIRONMENT



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In this pilot study we collaborate with WWF Sweden, an organisation with specific expertise on the Swedish public debate around sustainable food.

Funding

This project was only made possible by the generous contributions of the Swedish Postcode Foundation.

Version 1.0 - November 2022

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Meat Promotions in Supermarkets Encourage Unsustainable Consumption

EXECUTIVE SUMMARY

- Supermarkets encourage meat consumption through multi-buy promotions.
- Nearly two out of three meat promotions give an incentive to purchase multiple items.

Meat consumption in general is a significant contributor to climate change. Despite this, Swedish supermarkets encourage the purchase of meat. Two out of three meat promotions give a price reduction only for consumers who buy multiple products. Recent research in the UK has shown that these 'multi-buy promotions' lead to increased consumption of the promoted food category, in this case meat. On top of that, meat with sustainability challenges is still heavily promoted by supermarkets. The meat that

- Meat with sustainability challenges is still heavily promoted by supermarkets.
- The meat that supermarkets promote hardly ever gets a green light according to the Swedish WWF meat guide.

supermarkets promote hardly ever gets a green light according to the Swedish WWF meat guide. These findings illustrate that Swedish supermarkets contribute to a high environmental impact of the Swedish food system. They also imply that supermarkets have excellent opportunities to contribute to a more sustainable food system. Limiting the use of multi-buys for meat and the promotion of meat that gets a red or yellow light is low hanging fruit.



FOREWORD

Halting climate change and environmental degradation will only be possible with a transformation of the food system. Within this transformation the transition to a less animal and more plant-based diet is the single strongest lever to reduce the negative impact from our current food pattern. Supermarkets account for a large majority of our food consumption - 70 percent of what people eat on a daily basis is bought in supermarkets. Supermarkets have - through their product offer, pricing, promotions and other marketing techniques - substantial influence on the choices their customers make.

With our research we try to understand how supermarkets make healthy and sustainable food the easy choice. By publishing our findings in the form of rankings and concrete recommendations, we also motivate and support supermarkets in improving their daily conduct. In this specific Superlist Environment study we seek to understand the role Sweden's largest supermarkets can play in meat consumption. This role is assessed based on the type of meat promotions and the environmental impact of the types of meat that are promoted. Through this publication and through our collaboration with WWF Sweden we hope to motivate and support Coop, Hemköp, ICA and Willys in helping their customers reduce the animal and increase the plant based proteins in their diets.

I would like to thank the Questionmark Research Team and WWF Sweden for their dedication in producing this research and publication. To the Swedish Postcode Lottery we are very grateful for their support in making a positive impact on the Swedish food system.

CHARLOTTE LINNEBANK

Director, Questionmark Foundation

Questionmark



What is Superlist?

Supermarkets play a key role in influencing consumers' food purchases, as they account for 72% of total food consumption (SVDH, nd). This gives them the opportunity to make food habits healthier and more sustainable. Superlist is a research programme aimed at helping supermarkets recognize these opportunities.

Superlist is a multi-year research project that provides insight into what supermarkets are doing to make the food system healthy and sustainable. Superlist also provides a tool to monitor and track supermarkets' actions in this area, identify which supermarkets are leading the way and which are lagging behind, and what they can do to improve their position.

Collaboration with WWF

For this project Questionmark Foundation collaborated with WWF Sweden. WWF is a non-profit environmental and nature conservation organisation. Within this project they contributed their knowledge on environmental issues and their expertise on the Swedish public debate to the methodology and this report.

Governance

Questionmark Foundation is a European think tank. Its mission is to contribute to the public debate around healthy and sustainable diets by providing facts, figures and arguments. Questionmark Foundation is governed by an independent board whose members have no commercial interests in the food industry. Questionmark does not receive any funding that is directly or indirectly related to the Swedish retail or food industry. This project is financed by the Swedish Postcode Foundation. Our integrity policy can be found on [our website](#).

Methodology

The research methodology for this pilot study was published on the 5th of July on thequestionmark.org. The methodology was based on our general [Research Framework](#), also available on our website. Any deviations from the framework in this pilot, such as the limited scope of the indicators, are due to the pilot status of this project.

Scope

The scope of this pilot entails four supermarkets: Coop, Hemköp, ICA and Willys. These supermarkets represent the three largest Swedish grocery retail groups in terms of market share: Axfood (19 percent, including Hemköp and Willys, and other retailers), Coop (18 percent) and ICA (53 percent). The total market share of this selection adds up to approximately 88 percent. A full scope Superlist covers all major supermarkets with a cumulative market share of at least 85 percent in a country or region.

For Coop, Hemköp and Willys the general websites were used to scrape the data on products and promotions. For ICA, the store *ICA Kvantum Värtan* was selected on the website¹. ICA consists of different store profiles, including Maxi, Nära, Kvantum and Supermarket stores. The analyses of this study build on ICA Kvantum.

Research period

Data on assortment and promotions for this pilot study were collected for 6 weeks between August 15th and September 26th 2022. During this period, each supermarket's online store was visited weekly. For a full scope Superlist, the data collection period is at least 8 weeks.

Twin publication

Based on the same data as used for this report, a separate study has been conducted considering unhealthy food products promoted by Swedish supermarkets. The report 'Swedish Supermarkets and the Promotion of Unhealthy Food' will be published at the end of 2022.

¹For online shopping at ICA, a visitor must select a specific store. Hence, also for data collection, a particular store was selected to scrape the promotions. The store ICA Kvantum Värtan was selected. This is a relatively large store with a wide range of products.

Introduction

Supermarkets are in an influential position to encourage healthier and sustainable food choices. Promotions are a powerful tool to nudge purchasing decisions. We examined how four of the largest Swedish supermarkets promote meat sales using price promotions.

Background

Meat consumption and the environment

In Sweden, direct consumption of meat (products) per capita is 50 to 55 kilograms per year (Livsmedelsverket, 2022). The food we eat carries a considerable environmental footprint, and meat and dairy consumption in particular are a significant contributor to greenhouse gas emissions, water use, pollution, land use and biodiversity loss. A recent article published in *Nature* concluded that a global shift to a more plant-based diet is needed to keep climate change 'under the 2°C global warming target that governments have signed up to', where countries committed to limiting the average global temperature rise to under 2 degrees Celsius (Springmann e.a., 2018).

Impact of promotions

Promotions can influence a consumer's decision to purchase and then eat more meat. There are no specific studies looking into Swedish consumer behaviour related to promotions, but recent research in the UK shows that promotions stimulate customers to not only buy more of a certain product, but also of the promoted category in general (PHE, 2020). For fresh meat, 14 percent of the volume bought on promotion constitutes a net increase in sales: shoppers buy more meat than they would otherwise have bought, and consume it more quickly. These numbers were even higher for poultry (18 percent additional volume purchased) (PHE, 2020).

Multi-buys

In this study, we distinguish two types of price promotions: *multi-buy promotions* (e.g. “3 for 20 kr”, or “buy one get one free”) and *temporary price reductions* (e.g. “10% off” or “now only 15 kr”). Compared to temporary price reductions, multi-buy promotions provide a stronger incentive for people to buy more of the promoted product. The UK research shows that up to 27 percent of the volume of product bought within a standard ‘2-for-1’ promotion should be considered as a net increase of the entire product category (PHE, 2020). In other words: over a quarter of the products bought on a 2-for-1 promotion are extras, not compensated by a *decrease* in sales of similar products.

Research method

Within this study, two indicators were investigated. For indicator 1, the share of meat promotions was investigated, along with the type of promotion. For indicator 2, the environmental impact of meat promotions was investigated. The results of the two indicators were presented individually.

Indicator 1

The first part of the results describes the number of meat promotions as a ratio of total online food promotions. We analysed the promotions for all meat products during the six week research period. Subsequently we classified each promotion as either a *multi-buy promotion* or a *temporary price reduction*.

In the analyses, we made a distinction between different types of meat: beef, chicken, pork, and other/mixed meat. The latter refers to a meat product that either consists of multiple meat types (e.g. minced meat made from both beef and pork) or belongs to a different type of meat (e.g. turkey or game meat). This distinction was made in favour of the second indicator of this report (see below).

Indicator 2

As a second indicator we looked at meat promotions and their environmental impact. Since promotions are a powerful tool to nudge purchasing decisions, the sort of meat that a supermarket chooses to promote has a direct environmental impact. We assessed the environmental impact of meat products promoted by four of the largest Swedish supermarkets. For this, we used the Swedish WWF meat guide (WWF, 2022). In this guide, meat either gets a red, yellow or green light, based on certifications and origin of a meat product. Meat products with a red light (read: ‘warning’) can be considered products with a relatively high environmental impact. Meat products with a yellow light (read: ‘be cautious’) are products with a medium environmental impact. Meat with a green light (read: ‘eat occasionally’) has a relatively lower environmental impact, or in the case of the certification ‘Svenskt Sigill Naturbeteskött’ an even better impact related to biodiversity rich natural pastures. Retailer procurement criteria were not assessed by WWF. This means that if the companies have stricter general procurement criteria than are communicated at product level, then products that WWF assesses as for example red in the meat guide, may actually deliver on the yellow level.

Building on the Swedish WWF meat guide, we analysed all meat products that were on promotion during the research period. We then assessed product information, focussing on origin and certifications, from the information available on the online product page.

Since the meat guide only applies to distinct types of meat, a distinction was made between beef, chicken, pork, and other/mixed meat. The environmental impact of meat products in the latter category were not assessed through the meat guide; their environmental impact was left *unknown*.

Supermarkets Encourage Meat Consumption through Multi-buy Promotions

INDICATOR 1: THE NUMBER OF MEAT PROMOTIONS AS A RATIO OF TOTAL ONLINE FOOD PROMOTIONS.

- During the research period, around one in twelve promotions concerned a meat product.
- Nearly two out of three meat promotions give an incentive to purchase multiple items.

In total, 868 meat products were promoted by the supermarkets during the research period. The share of meat promotions out of total online

promotions was on average 7 percent. Figure 1 presents the share of meat promotions for the different supermarkets.

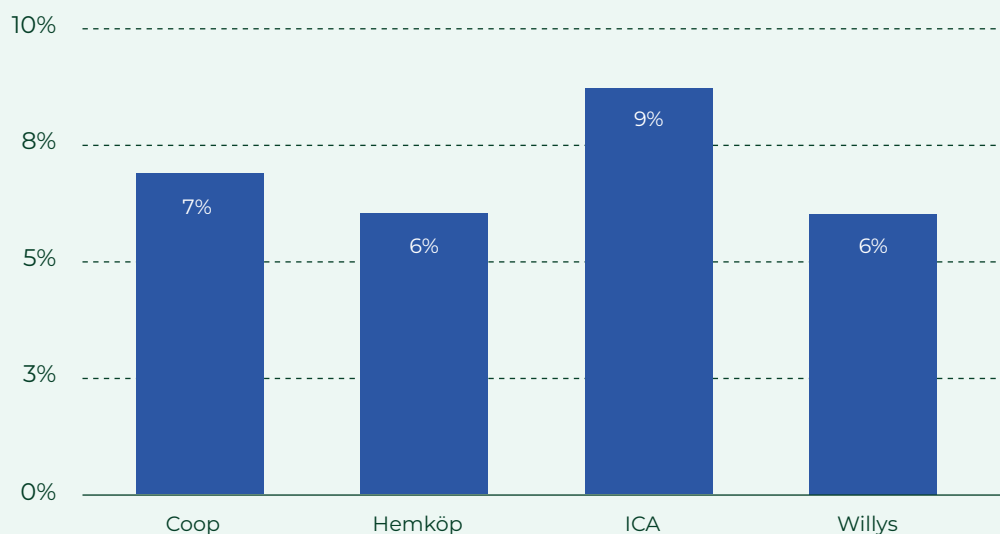


Figure 1. The share of meat promotions out of total products promoted by the supermarkets.

Figure 1 shows that the share of meat promotions out of all food promotions is roughly the same for all supermarkets. However, when we look at the absolute number of meat promotions, the results give a slightly different view.

Figure 2 gives a breakdown of the absolute numbers of meat promotions per supermarket.

From figure 2 it can be concluded that, while the supermarkets promote roughly the same shares of meat products, the absolute number of meat products differ per supermarket. Coop (348) and Hemköp (245) ran considerably more promotions

for meat than Willys (152) and ICA (123). It is not yet clear how the behavioural effects of a high absolute number of meat promotions differ from the effects of a high share of meat promotions among other promotions.

By contrast, recent research shows that different promotional techniques have significantly different effects. Most notably multi-buy promotions are strongly linked to increased consumption. This makes it relevant to analyse the type of promotion used to promote meat products. Figure 3 provides the share of meat products promoted by multi-buys.

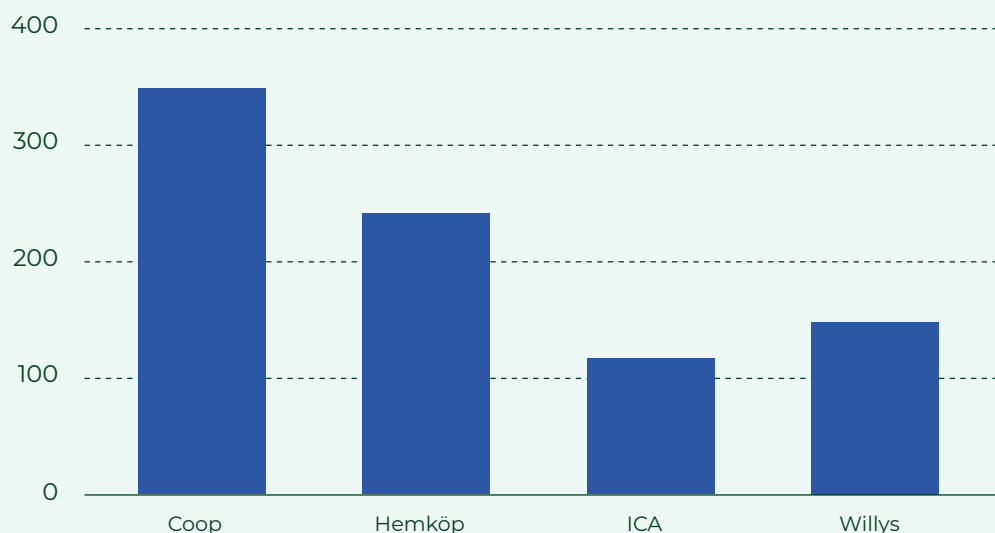


Figure 2. Absolute numbers of meat promotions per supermarket.

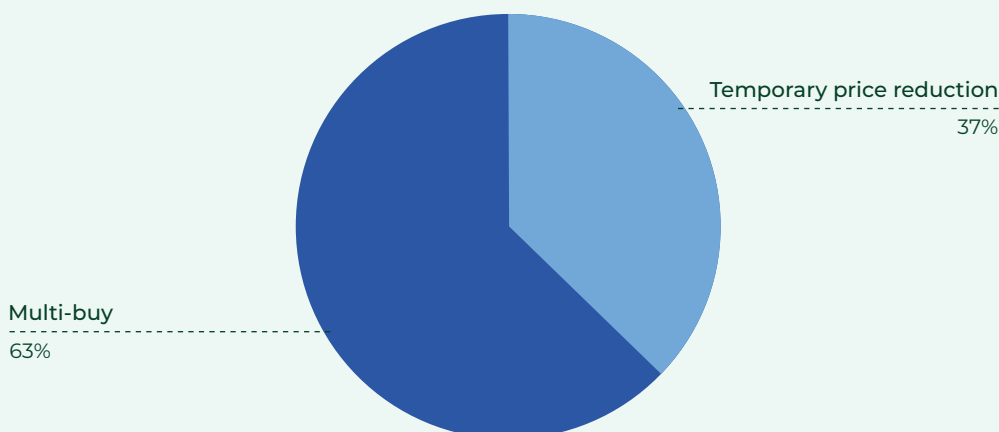


Figure 3. Multi-buy meat promotions as a ratio of total online meat promotions.



In total, 63 percent of all meat promotions were promoted through multi-buys (figure 3). The other one third of meat promotions were promoted

by temporary price reductions. See figure 4 for examples of meat products that were promoted by multi-buys during the research period.



Figure 4. Examples of meat products that were promoted by multi-buys during the research period at Coop, Willys, Ica and Hemköp



In figure 5, the share of meat products promoted by multi-buys are presented per supermarket. It appears that Coop ran a considerably high share of multi-buy promotions for meat products (79 percent) (see figure 5). Hemköp also promoted the majority of its meat products by multi-buys

(63 percent). On the contrary, meat products at ICA and Willys were more often promoted by temporary price reductions than by multi-buys (37 percent and 30 percent multi-buy promotions respectively).

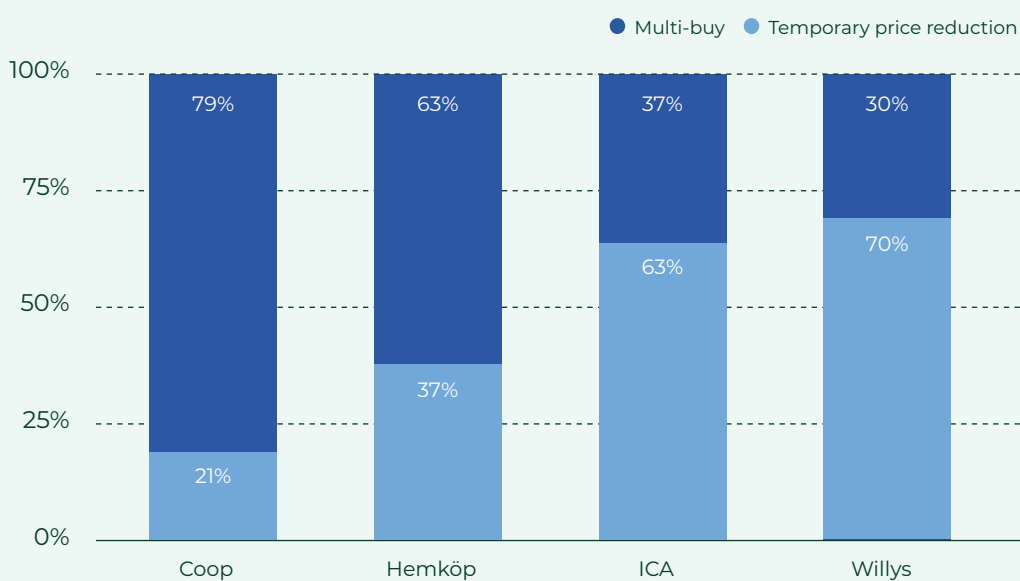


Figure 5. Multi-buys and temporary price reductions in total meat promotions per supermarket.

Meat with Sustainability Challenges is Still Heavily Promoted by Supermarkets

INDICATOR 2: THE NUMBER OF PROMOTED MEAT PRODUCTS THAT GET A RED LIGHT IN THE SWEDISH WWF MEAT GUIDE AS A RATIO OF TOTAL MEAT PROMOTIONS.

- *The meat that supermarkets promote hardly ever gets a green light according to the Swedish WWF meat guide.*
- *Most promotions that could be assessed through the Swedish WWF meat guide either got a red or yellow light.*

Firstly, we present the distribution of the environmental impact of all meat promotions, as defined by the Swedish WWF meat guide (figure 6). Figure 6 shows that of all meat promotions, two out of three were assessed either red or yellow (68

percent). Hardly any meat products on promotion got a green light (3 percent). For some meat promotions, the environmental impact was unknown (29 percent).

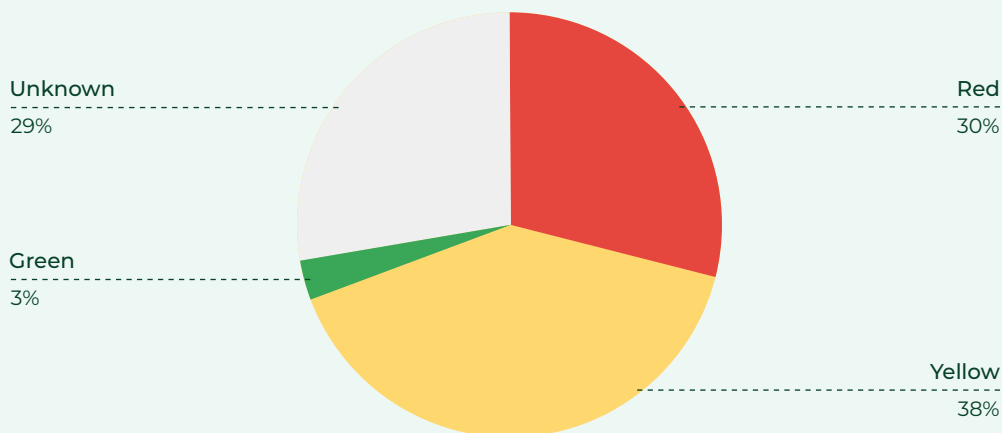


Figure 6. Meat promotions and their environmental impact according to the Swedish WWF meat guide.

This can be due to two different reasons: 1) the origin of the meat product was not mentioned/ displayed on the supermarket's website; or 2) the meat type is other or mixed meat, so the environmental impact could not be retrieved². Figure 7

shows examples of meat products with a green light that were on promotion during the research period. For examples of meat products with a red light, see figure 8.



Figure 7. Examples of some of the few meat products that were promoted, assessed as green according to the Swedish WWF meat guide at Coop, Willys, Hemköp and Ica.



Figure 8. Examples of meat products that were promoted, assessed as red according to the Swedish WWF meat guide at Coop, ICA, Hemköp and Willys.

²The Swedish WWF meat guide provides assessments for distinct meat types, including beef, pork and chicken. In this study, the category other/mixed meat includes meat types such as turkey and game meat. It also includes mixed meat products where two types of meat are merged into one product. Meat products in the other/mixed meat category were not assessed through the meat guide.



In figure 9 the environmental impact of meat promotions is presented for the different supermarkets.

The figure shows that there are no striking differences between the different supermarkets. Large shares of meat promotions could not be assessed through the Swedish WWF meat guide for all supermarkets, which makes it difficult to

draw hard conclusions. However, given the fact that 'green light' meat is often marketed as a premium product, it is unlikely that the segment of unknown meat promotions contains many products that would get a green light. This suggests that Coop and ICA (both 4%) had a slightly larger share of promotions for meat that gets a green light than Hemköp and Willys (both 1%).

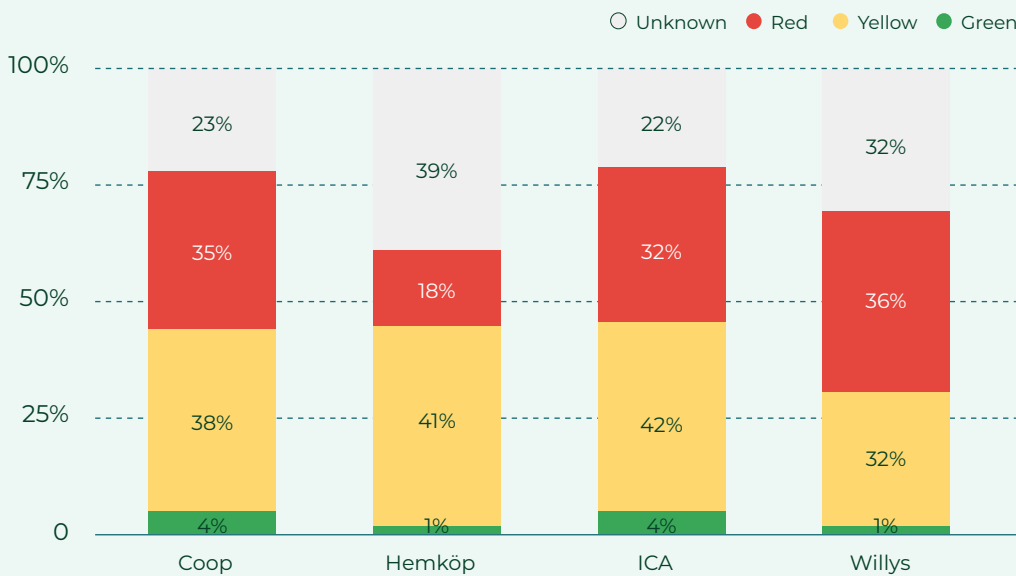


Figure 9. Meat promotions and their environmental impact per supermarket.



The assessment by the Swedish WWF meat guide depends on the origin and certifications of the meat product, but also differs per type of meat. We made a distinction between beef, chicken, pork and other/mixed meat (where the latter was not assessed). Figure 10 shows the distribution of the different types of meat that were promoted during the research period.

From figure 10 it can be concluded that pork (53 percent) is the type of meat that was most often promoted by the supermarkets. Also, considerable amounts of chicken (17 percent) and other/mixed meat (24 percent) were promoted. Only low shares of beef products were promoted during the research period (6 percent).

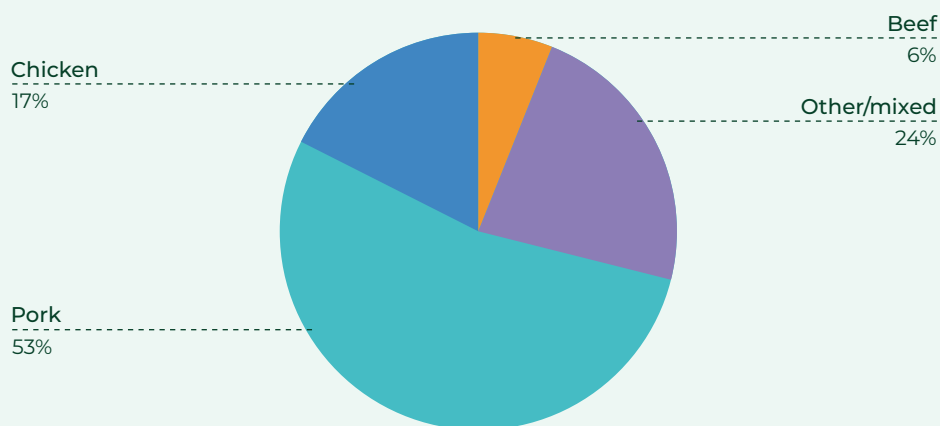


Figure 10. Meat promotions divided into the type of meat.



Conclusions and Recommendations

- *Supermarkets encourage meat consumption through multi-buy promotions.*
- *Nearly two out of three meat promotions give an incentive to purchase multiple items.*
- *Meat with sustainability challenges is still heavily promoted by supermarkets.*
- *The meat that supermarkets promote hardly ever gets a green light according to the Swedish WWF meat guide.*

Swedish supermarkets encourage the purchase of meat products. Coop in particular extensively promotes meat products through multi-buy promotions. Recent research in the UK has shown that these promotions lead to increased consumption of the promoted category. Meat consumption in general is a significant contributor to climate change, increased land use and eutrophication.

An interesting aspect of the promotions is the focus on pork and chicken. Beef, a meat type that to a larger extent depends on grass and silage for fodder, does not compete with food for humans. However, pork and poultry are dependent on soy and grains

in feed, and to a lesser extent eat residues in the food system.

On top of that, nearly all meat products promoted by supermarkets got a red or yellow light in WWF Sweden's meat guide. Therefore, promotion practices of Swedish supermarkets contribute to a higher environmental impact due to meat consumption. However, for supermarkets wanting to contribute to a more sustainable food system, improving current promotion practices provide excellent opportunities. Limiting the use of multi-buys for meat is low hanging fruit, in particular for Coop and Hemköp.

Recommendations to supermarkets

Based on the findings of this report, we recommend supermarkets consider the following actions:

- Formulate policy to avoid promotions that lead to an unsustainable diet. We give a few suggestions for concrete measures:
 - ⇒ A limit to the number or frequency of promotions for meat;
 - ⇒ A ban on multi-buy promotions for meat;
 - ⇒ A ban on promotions for meat that gets a red light by the Swedish WWF meat guide.
- Concerning online stores, adhere to the legislation that requires transparency on the origin of meat products.
- For product transparency, make certifications visible that are recognised by WWF.



In this annex we give a quick overview of our approach to ensuring data quality. Data collection happens mostly automatically. These processes were monitored, and checked for inconsistencies. At several points manual sample-based checks were done.

Data Quality and Analysis

DATA COLLECTION

Products

On a weekly basis, all food products available in the online stores were collected with an automated system. Products were detected by systematically browsing the website through the categories. We did not include products that can only be found through a name search.

Most products re-occurred in our searches every week. However, some products were removed from, or added to, the assortment during the research period. Hence the total number of products registered over the whole period may be slightly higher than the number of products on offer at any given moment.

Product data

Product data was retrieved from the webpage as-is. This includes name, nutrition table, ingredient list, certifications, country of origin, etc. In case product data changed during the research period, the most recent version was used for analysis.

When data was missing, we may have used data from a different online store to complete it, but only if both products can be identified as identical.

Promotions

Each product that was indicated as a promotion ("1 + 1 free", "20 percent off", discounted price, etc.) was considered to be a promotion in that week. A promotion that ran for four weeks was thus counted as four different promotions for the same product.

Subsequently all promotions that require the purchase of multiple items (in order to benefit from a price reduction) were marked as multi-buy promotions. This includes promotions of the type:

- 2 for 1
- 1 + 1 free
- Any 3 for 50 kr

ANALYSIS

Meat

For a categorization of products as meat, we used the supermarket's categorisation as point of departure. We assume that all products with meat as a main ingredient were categorised as meat. For broad supermarket categories like *Top rated*, *Eco-friendly*, *New*, etc. products were manually categorised.

For the environmental impact of meat we used the Swedish WWF meat guide (WWF, 2022), as explained in the [Introduction](#).

Environmental impact of meat

For the environmental impact of meat promotions, we used the Swedish WWF meat guide (WWF, 2022). In this guide, meat is either assessed red, yellow or green, based on the origin and certifications of a meat product.

Origin

For an assessment of origin information, we looked for statements of origin on the product pages in the online store. A country flag (Swedish flag, British flag, etc) on the product page was interpreted as referring to the country of origin. In Sweden the 'Från Sverige' label is displayed on products that originate from Sweden. We assumed that the origin mentioned regards the country where animals were reared, yet we did not assume the declaration of a country of processing was the same as origin.

Certifications

For an assessment of certifications, we looked for statements of certifications on the product pages in the online store. The certifications mentioned or shown on the product page were assessed. We specifically looked at the following certifications, as they were recognised by the Swedish WWF:

- KRAV
- EU organic
- Svenskt Sigill Klimatcertifierad
- Svenskt Sigill Naturbeteskött
- Svenskt Sigill
- Label Rouge

COMPLETENESS AND CORRECTNESS

Completeness

We looked at all the products a supermarket sells online. Our starting point was products that can be found by browsing the website through the categories or list of products (depending on what the website offers). We did not include products that can only be found through a name search.

The number of products and promotions found each week was compared with other weeks, to detect deviations. Also any errors occurring during a website visit were monitored and investigated. Finally, for each online store, a manual sample-based check was done to see if all (food) products were included.

Correctness

For a correct comparison between supermarkets, both the product data and the processing need to be correct. We took the product data (nutrients, ingredients, name, etc.) from the website as-is; in some cases we could use product data found in one online store to complete data from another online store. To make sure that we processed the product data correctly, we did a sample-based check for each online store to see if the data was taken over and recognized correctly.

As mentioned before, the general websites of the supermarkets were used to scrape the data on products and promotions, except for ICA. ICA's website requires the selection of a specific store. For data collection, the store *ICA Kvantum Värtan* was selected, which is a relatively large store with a wide range of products. Since ICA consists of different store profiles, including Maxi, Nära, Kvantum and Supermarket stores, the scope for ICA as a whole is limited in this study. The analyses of this study build on ICA Kvantum specifically, and can therefore differ from the analyses for Maxi, Nära and Supermarket stores. Besides, the selected store is located in the city of Stockholm, which might also have impacted the outcomes. The outcomes can be different for ICA (Kvantum) stores that are located in other regions of Sweden.

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