

Food, Risk Perception and Culture

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Food Safety Commission

Tokyo, September 19, 2008

食品、リスク認知、文化

Claude Fischler

クロード・フィッシュラー

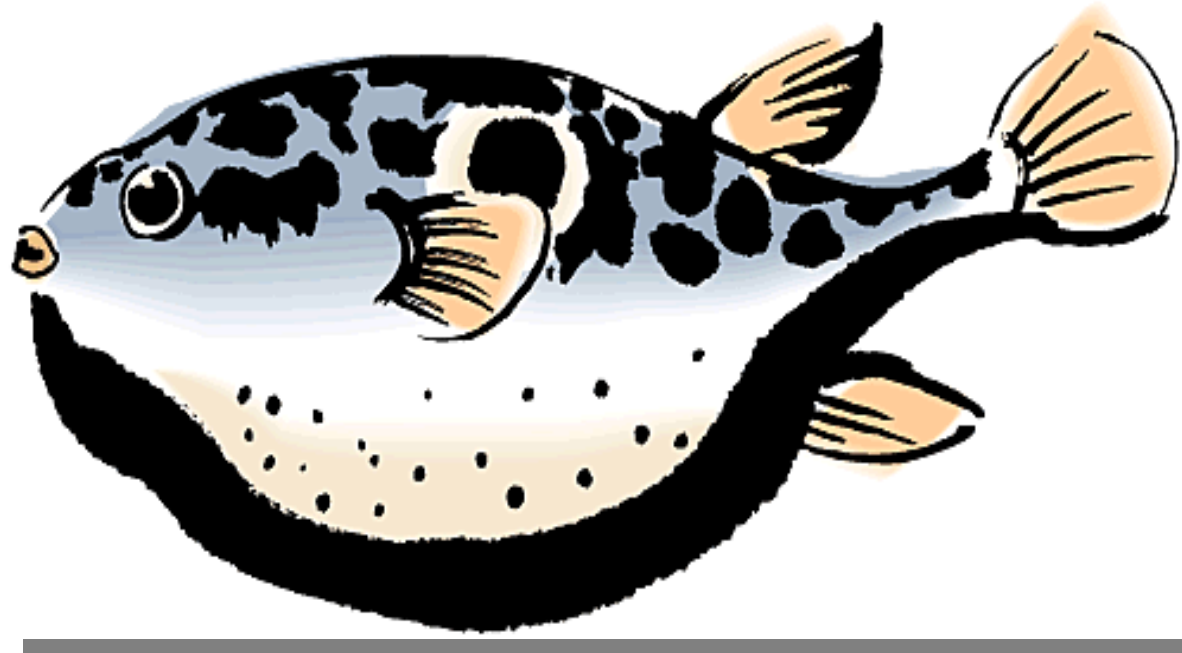
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(CNRS & EHESS, Paris)

食品安全委員会

リスクコミュニケーション専門調査会

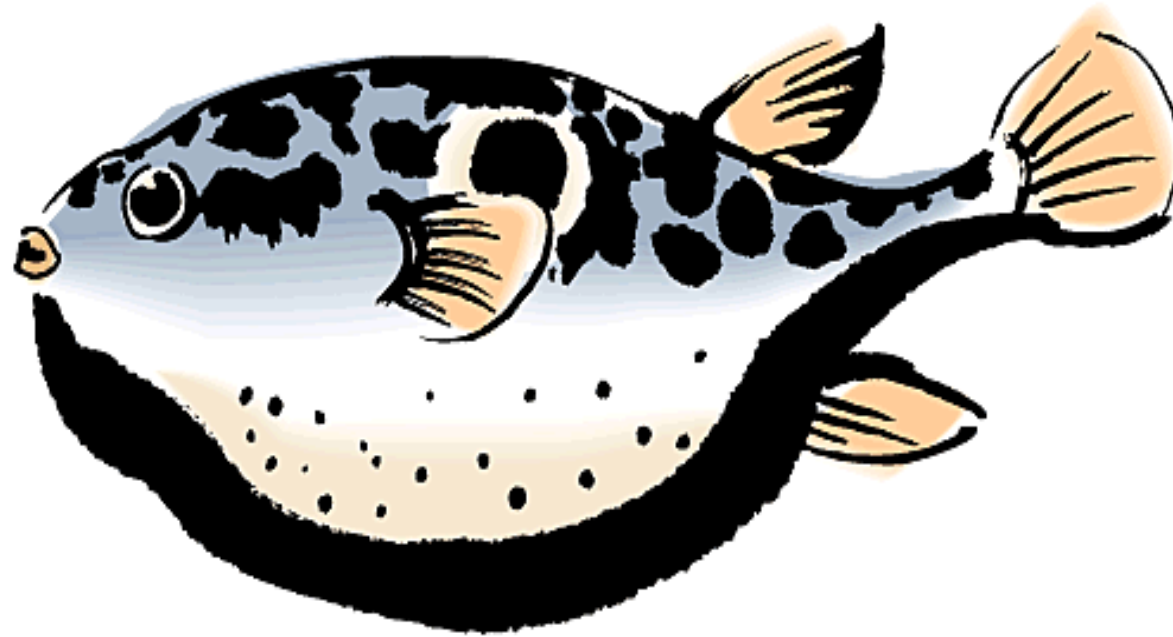
2008年9月19日 東京

Do consumers *really*
want “zero risk” ?



FUGU

消費者は、本当に「ゼロリスク」
を求めているのか？



フグ

Worlds Apart? The Reception of Genetically Modified Foods in Europe and the U.S.

George Gaskell,^{1*} Martin W. Bauer,² John Durant,³ Nicholas C. Allum¹

Recent controversies about genetically modified foods in the United Kingdom and several other European countries highlight the apparent differences that exist in public opinion on this subject across the Atlantic. Why are people in the United States seemingly untroubled by a technology that causes Europeans so many difficulties? The results of survey research on public perceptions of biotechnology in Europe and the United States during 1996–1997, together with an analysis of press coverage and policy formation from 1984 to 1996, can help to answer this question.

An international study of biotechnology in the public sphere (1) sheds some light on why genetically modified (GM) foods are so much more controversial in Europe than in the United States. Here, we compare public perceptions of five applications of modern biotechnology and look for explanations for the differences between Europe and the United States in terms of media coverage, trust in the regulatory process, and scientific literacy.

In October 1996 a representative sample survey (about 1000 respondents per country) was conducted in all 15 member states of the European Union, together with Norway and Switzerland (henceforth "Europe"). The key questions were also used in a U.S. survey in late 1997 (2). These surveys were conducted 2 to 3 years ago and over a period of roughly a year; hence, our data provide a historical snapshot of public perceptions in 1996–1997. Of course, with the rapid advance of food biotechnologies and other developments in the life sciences (such as the cloning of Dolly the sheep), we would not expect to find the same opinions and attitudes in 1999. But the use of similar questions in the surveys makes it possible to look at comparative structural differences in the pattern of public perceptions that may hold clues to understanding the situation in 1999.

Respondents were asked whether they thought each of five biotechnologies—genetic testing, GM medicines, GM crops, GM food, and xenotransplantation (GM animals for use in human transplantation)—was useful, risky, morally acceptable, and to be encouraged (2). Figure 1 shows the mean levels of support (encouragement), on a scale from

+2 to -2, for all the applications.

People in Europe and the United States showed varied levels of support across the different applications. GM medicines and genetic testing received the most support, GM crops and GM foods received intermediate support, and xenotransplantation received the least support. There was not always strong support for biotechnology in the United States; for example, the average U.S. respondent was opposed to xenotransplantation. Moreover, U.S. respondents were not always more supportive than European respondents; for example, Europeans were more supportive of genetic testing, whereas people in the United States were significantly more supportive of GM crops and GM foods than were people in Europe.

When the surveys were conducted, biotechnology was a relatively unfamiliar topic. On the questions about the five applications, 19% of the U.S. respondents and 27% of the European respondents did not give a complete set of responses. With this level of unfamiliarity, we can assume that some people responded to the questions with "nonattitudes" (3). Such responses would be likely to be volatile if, for example, the issue became more controversial. To this extent we must be cautious in our interpretations of and extrapolations from the survey results. In the absence of a filter question allowing us to exclude those people with "no opinion" (4), the following anal-

ysis uses only those who gave a full set of responses, on the assumption that they were more likely to have better formed opinions. Judgments of use, risk, moral acceptability, and encouragement were each collapsed into a dichotomy (useful/not useful, and so forth) so as to model patterns of response (henceforth "logics") over the four dimensions of attitude. This produces 16 possible combinatorial logics (Table 1), but empirically only three were widely used.

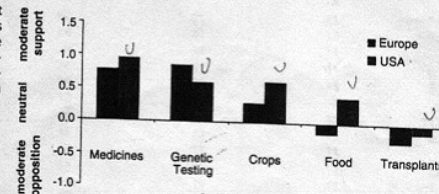
Logics 1 and 2 are similar in being supportive, but they display different perceptions of risk. For the "supporter," risk is not an issue. The "risk-tolerant supporter" sees but then discounts the risk. Opponents take a position exactly opposite to that of supporters.

Table 2 shows the distribution of these three prevalent logics for each application. For GM medicines and genetic testing, supporters constituted the single largest category. Levels of risk-tolerant support were also relatively high, and levels of opposition were relatively low. Greater opposition to genetic testing in the United States ($P < 0.05$) than in Europe may indicate a sensitivity about genetic privacy in the context of work, credit, or insurance. In contrast, for xenotransplantation, supporters and risk-tolerant supporters totaled only 36% in Europe and 42% in the United States, with about 33% in opposition.

Turning to GM crops and GM foods, we see a contrast between Europe and the United States. Both GM crops and GM foods were better supported in the United States than in Europe (for both contrasts, $P < 0.05$). For both applications, there were fewer supporters and more opponents in both the United States and Europe. The contrast is greatest in the case of GM foods, to which 30% of Europeans were opposed.

A fourth possible logic—"moral opponents" (in the context of Table 1, answers =

Fig. 1. Mean support for five applications of biotechnology. The United States and Europe differ significantly for each application (F values from one-way analyses of variance for each application were all significant at $P < 0.05$).



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正反対？
遺伝子組み換え食品
に対する欧州と米国の認識

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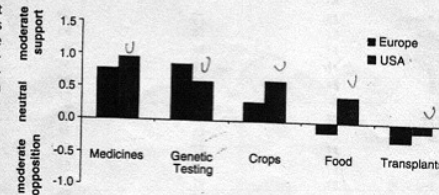
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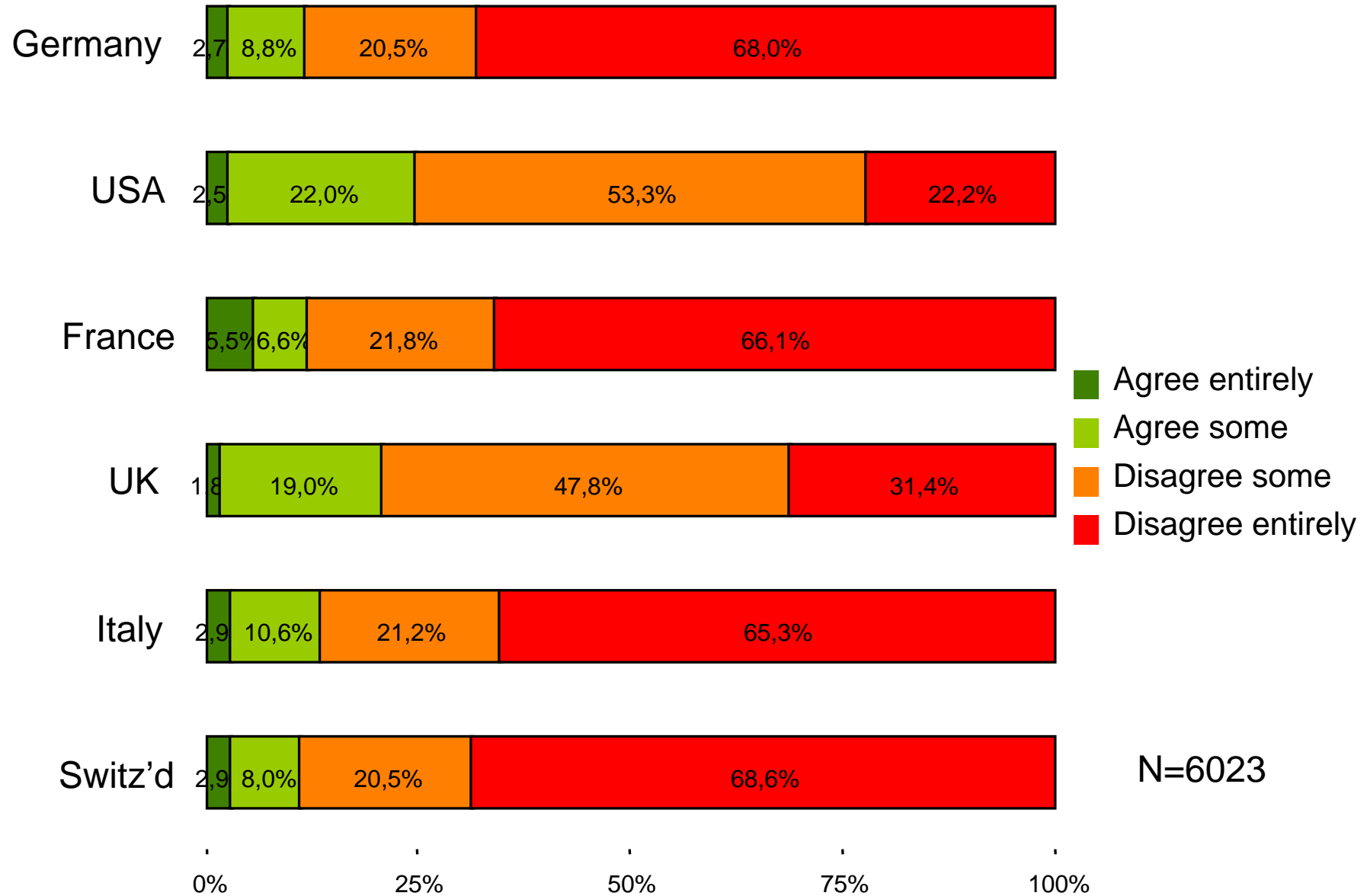
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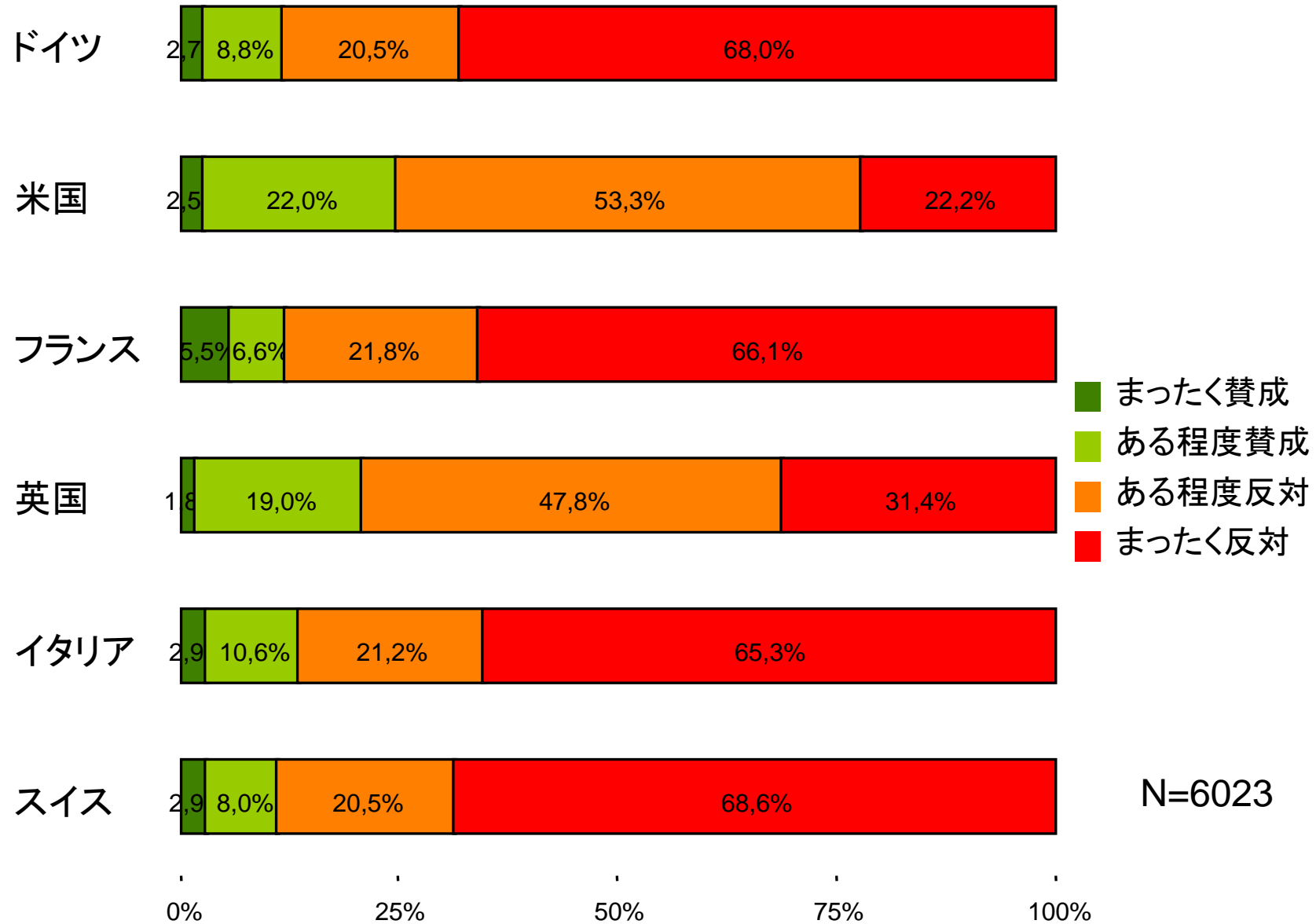
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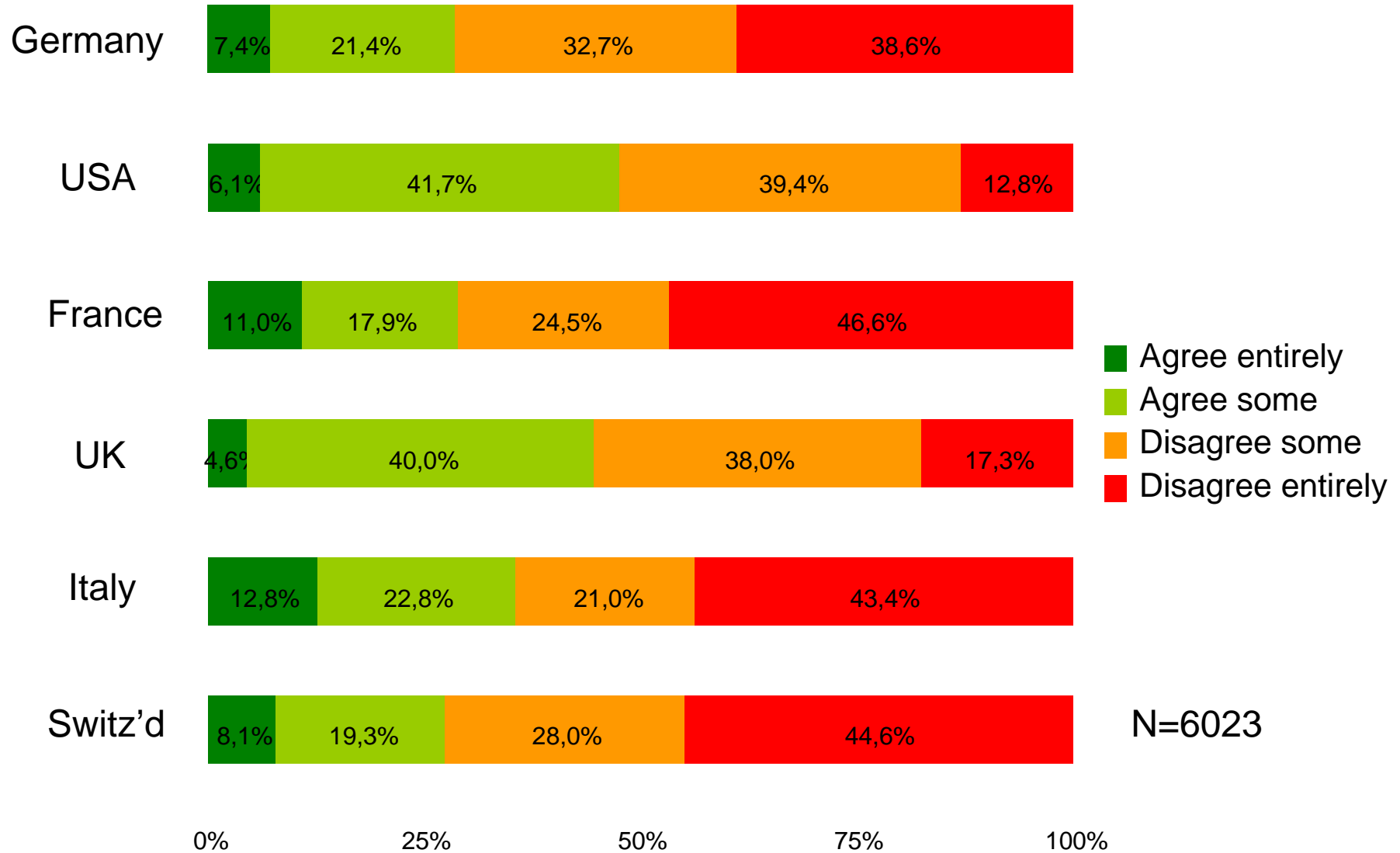
“In favor of GMOs in Food”



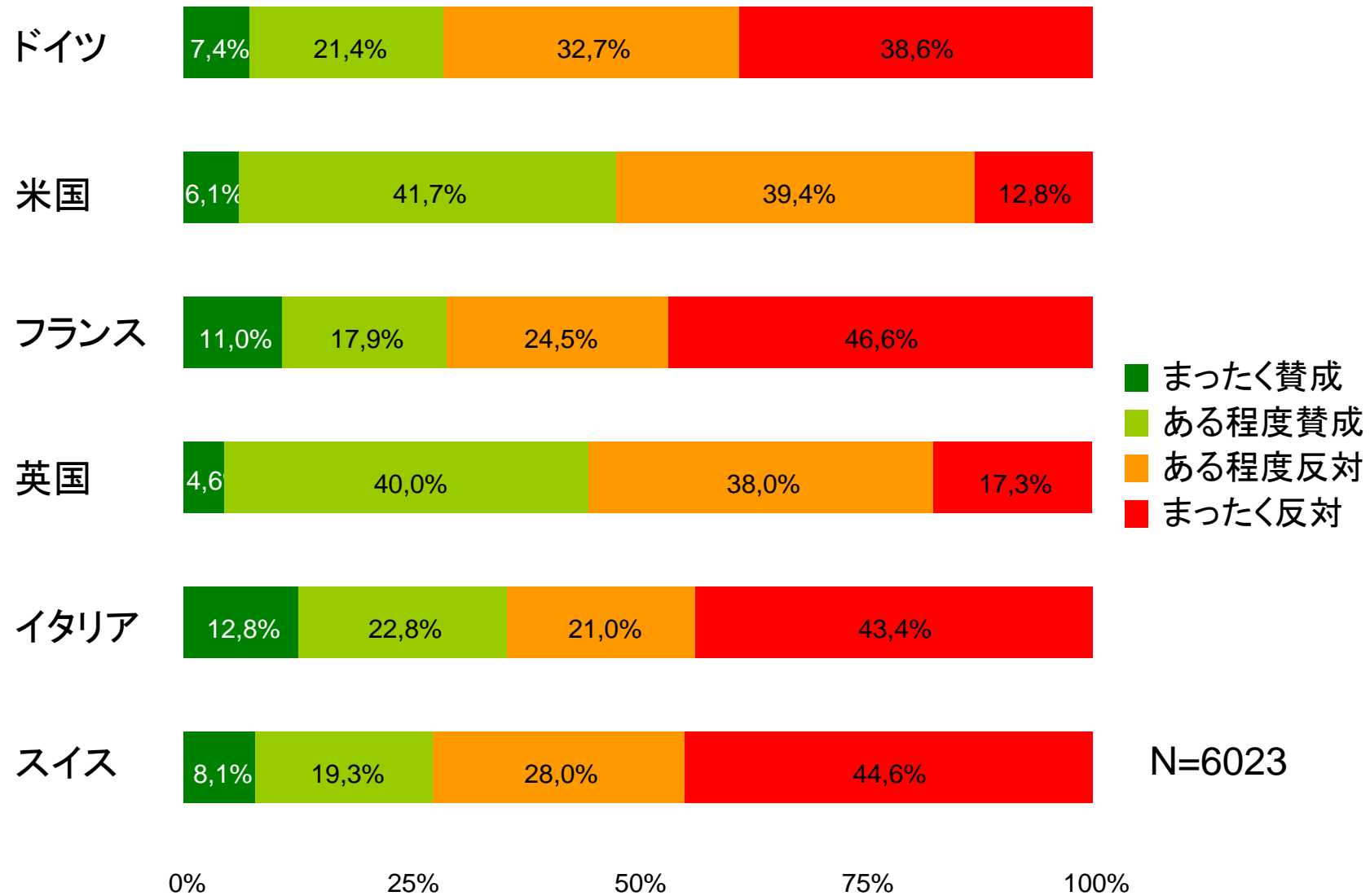
「食品としての遺伝子組み換え作物(GMO)に対する姿勢」



“In favor of GMO research in general”



「遺伝子組み換え作物(GMO)研究に対する姿勢」



GMOs: Cultural difference...

- In extent...
 - English speakers feel less strongly
 - Are less negative
- ...but not in nature:
 - A majority against GMOs
 - Including in UK and US

GMOs: 文化の差

- ある程度の文化差はあるが・・・
 - 英語圏の人は、それほど強い感情を抱いていない
 - 否定的な意見は少数である
- ……本質的には、差はない
 - 大多数がGMOに反対している
 - 英米も含まれる

A difference...

- In extent
 - English speakers feel less strongly
 - Less negative
- Not in Nature
 - A majority against GMOs
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差異

- ある程度の差はあるが・・・
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“Average consumer” ?

“[...] this Regulation takes as a benchmark *the average consumer*, who is reasonably well-informed and reasonably observant and circumspect, taking into account social, cultural and linguistic factors, as interpreted by the Court of Justice, but makes provision to prevent the exploitation of consumers whose characteristics make them particularly vulnerable to misleading claims”.

Regulation (EC) No 1924/2006 of the European Parliament

「平均的な消費者」とは？

「……この規則は、“平均的な消費者”の目安となる。この消費者は、それなりに知識を持ち、しっかり観察し、注意を配ることのできる人々である。また、裁判所により解釈された社会的、文化的、言語的な要素を考慮に入れることができる。しかし、詐欺まがいの宣伝文句に引っかかりやすい消費者が被害にあわないように、備えを怠らない人々でもある。」

欧州議会発布のEC規則 No 1924/2006

Outline

- Similarities
 - Apparently universal features
 - Bias, heuristics
- Differences
 - Surprisingly consistent over time
 - Yet susceptible to changes

概略（もしくはアウトライン）

- 共通点
 - 明確な共通性
 - 先入観、新たな発見
- 相違点
 - 長期間にわたり、驚くほど一貫している
 - しかし、変わりやすい

1. Apparently universal features

1. 明確な共通性

Universals

- Cognitive biases in risk perception
- Magical thinking: You are what you eat
- Natural is preferred (chemicals --)
- Animal vs Plant food

共通性

- リスクの認知バイアス
- 魔術的思考：食は人を表す
- 化学物質よりも、自然物が好まれる
- 動物性食品と植物性食品

Expert vs Lay Rating of Risks

	W. Voters	Students	Club	Experts
Nuclear	1	1	8	20
Automobile	2	5	3	1
Guns	3	2	1	4
Tobacco	4	3	4	2
Motorcycle	5	6	2	6
Alcohol	6	7	5	3
Private Av.	7	15	11	12
X Rays	22	17	24	7

Slovic, 1987

専門家と一般人のリスク評価の比較

	女性有権者	大学生	環境保護 団体	専門家
原子力	1	1	8	20
自動車	2	5	3	1
銃	3	2	1	4
タバコ	4	3	4	2
オートバイ	5	6	2	6
アルコール	6	7	5	3
自家用機	7	15	11	12
X線	22	17	24	7

Slovic(1987年)

Expert vs Lay Rating of Risks

	Lay	Experts
Nuclear Energy	1	20
X Rays	22	7

専門家と一般人のリスク評価の比較

	一般人	専門家
原子力	1	20
X線	22	7

Why? Identified Factors

- Risk Configuration
- Human Perception
 - Specific features of the human mind
- The very specific dimension of food risk
 - Magical thinking

なぜ異なるのか？ 特定要因

- リスクの構造
- 人間の知覚特性
 - 人間固有の性質
- 食品リスクに特有の側面
 - 魔術的思考

Fear & Outrage Factors

Fear & Outrage ++

Proximity

Imposed risk

Benefit to others, not self

Impossible to control

Human cause

Novel Technology

Fear & Outrage -

Distance, abstraction

Deliberate risk

No benefit

Controllable

Natural cause

Familiar Technology

不安と反感を招く要因

不安と反感 ++

近い

強要されたリスク

自分ではなく他人の利益

制御不可能

人為的原因

目新しい技術

不安と反感 -

遠い、抽象的

熟考した上でのリスク

利益なし

制御可能

自然的原因

身近な技術

Cognitive Factors

- Probabilistic thinking is counter-intuitive
- Risk is a probabilistic notion
- Common way of thinking about risk is non-probabilistic: A yes-no view of risk
- Statistics and experience are difficult to reconcile

認知にかかわる要因

- 確率論的思考は直感でわかるものではない
- リスクとは確率論的な概念である
- リスクについての一般的な考え方は、確率論的でなく、イエスかノーかの判断である
- 統計と経験は、なかなか一致しない

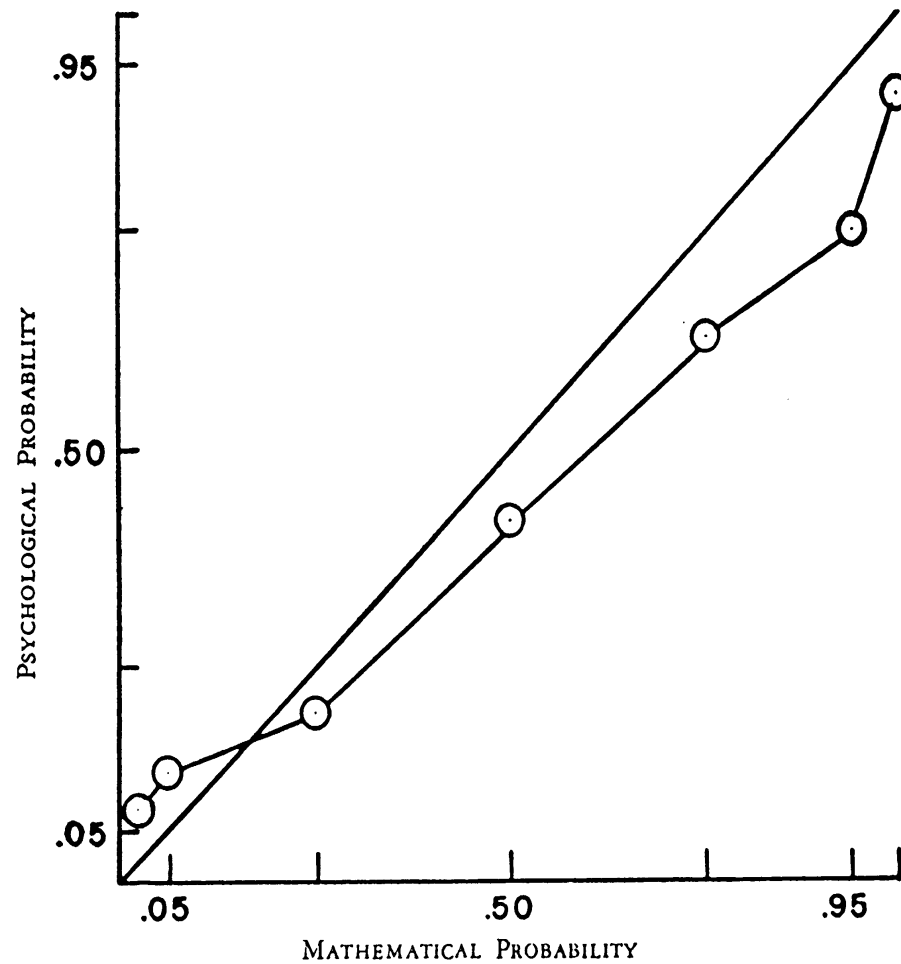
Rationality

- Judgments do not follow the probabilistic model
- Yet they are « neither foolish nor capricious » (Kahneman)
- Partly predictable

合理性

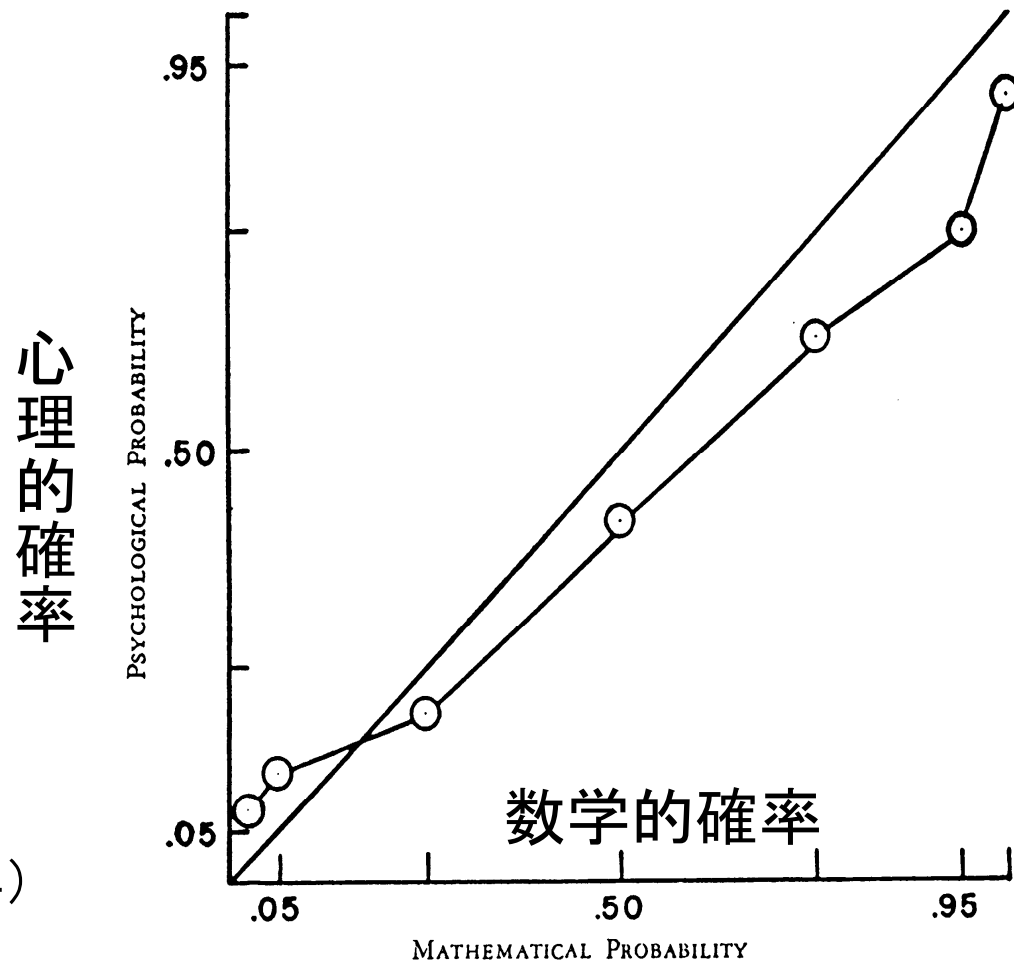
- 判断は確率論モデルに従わない
- しかし、これは「愚かでも気まぐれでもなく」
(カーネマン)
- 予測可能な面もある

Mathematical vs psychological probability



Preston & Baratta (1948)

数学的准确率と心理的准确率



Preston & Baratta (1948年)

Psychology of Probability

A universal cognitive bias:

- Small probabilities overestimated ($p < 0.35$)
- Very small probabilities enormously overestimated (1/10 000, 1/100 000 or 1/1000 000)
- Larger probabilities underestimated ($p > 0.4$)
- Probabilities above 0.7 vastly underestimated

心理的確率

普遍的な認知バイアス:

- 低い確率 ($p < 0.35$) が重視されている
- ごく低い確率 (1/10,000、1/100,000、1/1000000) が過剰に重視されている
- 比較的高い確率 ($p > 0.4$) が軽視されている
- 0.7を超える確率があまりにも軽視されている

Food: A Highly Sensitive Area

- Specific fears
- Food is the most *intimate* form of consumption
- Food & magical thinking
- (Meat and animal food are particularly sensitive)

食品：極めてデリケートな分野

- 具体的な不安
- 食品は最も身近な消費である
- 食品と魔術的思考
- (肉類と動物性食品は特にデリケートな問題)

Magical Thinking

The laws of magical thinking:

- Contagion : “Once in contact, always in contact”
- Similarity : “Image equals object”
- « You are what you eat » : contagion + similarity
- Not just a « primitive » trait

魔術的思考の法則

- 感染:「いったん接触したら、常に接触している」
- 類似性:「イメージ＝対象物」
- 「食は人を表す」:感染＋類似性
- 単なる「原始的」な特徴ではない

“You are what you eat”

- An apparently universal perception
- Example from New Guinea:
Young people should eat fast-growing plants
- Not just in New Guinea: See advertising for foods

「食は人を表す」

- 明確な共通認識
- ニューギニアの事例
- 若者は成長の速い植物を食べるべき
- ニューギニアだけではない: 食品広告参照

Nemeroff and Rozin, 1989

“You are what you eat”

- Asch impressions technique
- U of Pennsylvania students
- Rate personalities of the people
- Description of South Pacific “Culture”
 - Eat boar and hunt turtles but do not eat them
 - Eat turtles and hunt boar but do not eat them

NemeroffおよびRozin(1989年) 「食は人を表す」

- アッシュの印象形成法
- ペンシルベニア大学生
- 人物の性格をランク付け
- 南太平洋「文化」の説明
 - イノシシを食べ、カメは狩るが食べない
 - カメを食べ、ブタは狩るが食べない

Population: As of 1974, there were approximately 1500 Hagi.

Diet and Habits: The Hagi are mainly agriculturalists, and their diet is primarily vegetarian. Staples are bananas, taro and yams; they also gather wild plants. In addition to agriculture, the Hagi are accomplished hunters, especially of elephant. They use the hide for shelters, and sell the tusks to white men. They eat the meat only if crops fail and famine threatens, otherwise selling it to neighborhood tribes at local markets.

Diet and Habits: The Hagi are accomplished hunters, and their diet consists mainly of meat. The elephant is their primary game animal since it supplies the most meat. In addition to hunting, they raise various crops, mainly bananas, taro and yams; they also gather wild plants. Banana fronds are used for their shelters, while they sell their crops and wild plants to neighboring tribes and white man at local markets. They eat vegetables and fruits only when hunting is poor and hunger threatens.

Family Life: The Hagi live in small family units. They are monogamous. Children are highly valued. Elders are revered for their age and knowledge, and are offered the choicest foods when they can no longer hunt for themselves.

人口:1974年時点では、約1500人のHagiが住んでいる。

食事と習慣: Hagiの多くは農業に従事者しており、食事は基本的に野菜である。おもな産物はバナナ、タロイモ、ヤムイモ(山芋の一種)であるが、その他、野草を採取したりもする。農業のほか、彼らは狩りにも精通しており、特にゾウの狩りは上手である。皮は住居をつくるのに使い、象牙は白人に売っている。彼らは、農作物が不足し、飢えの危険に直面したときだけ肉を食べる。そのようなとき以外は、肉は市場で近隣の部族に売っている。

食事と習慣: Hagiは狩りがうまい。彼らの食事はおもに肉である。ゾウは、彼らのおもな食糧源であることから、重要な狩りの対象となっている。狩りに加えて、さまざまな農作物、たとえばバナナ、タロイモ、ヤムイモ(山芋の一種)などを育てている。その他、野草を採取したりもする。それらの産物は市場で近隣の部族や白人に売っているが、バナナの葉は住居をつくるのに使う。彼らは、狩りが不調に終わり、飢えの危機に直面したときだけしか野菜やフルーツを食べない。

家族の生活: Hagiは小家族単位で生活している。彼らは一夫一婦制である。子供はかなり大切に扱われる。お年寄りは年齢を重ね豊富な知識を持っているので尊敬される。高齢者は、もはや自分自身で狩りができなくなると、最高級の食べ物を与えられる。

Peaceful 1 2 3 4 5 6 7 8 aggressive

Boar eaters are:

Hairier, darker, more aggressive,
poorer swimmers

温厚 1 2 3 4 5 6 7 8 攻撃的

イノシシを食べる人の印象:

より毛深い、浅黒い、攻撃的、泳ぎが下手

Naturalness

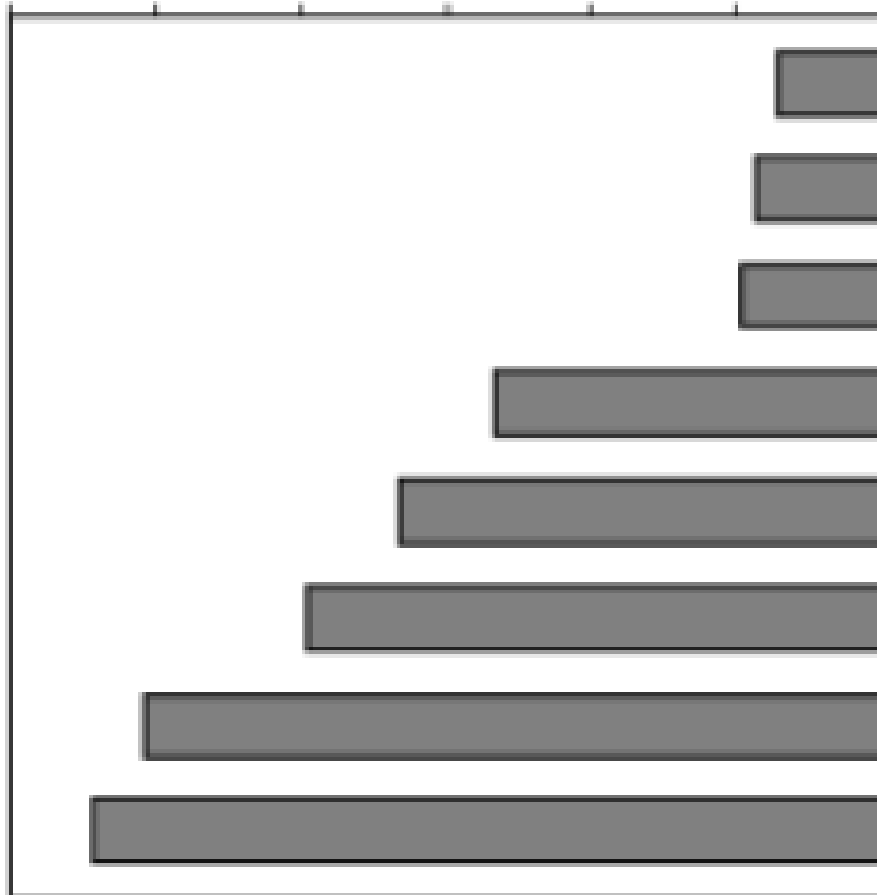
- The natural superiority of natural
- Instrumental *and* Ideational
- Adding vs subtracting
- Role of contagion
- Process more important than content
- Chemical more important than physical

自然性

- 自然における本質的な優位性
- 手段的と概念的
- 足し算と引き算
- 感染の役割
- 内容より重要であるプロセス
- 物理学より重要である化学

Percentage Reduction in Naturalness

60 50 40 30 20 10 0



mix like naturals

physical transformation

domestication

grown commercially

mix unlike naturals

chemical transformation

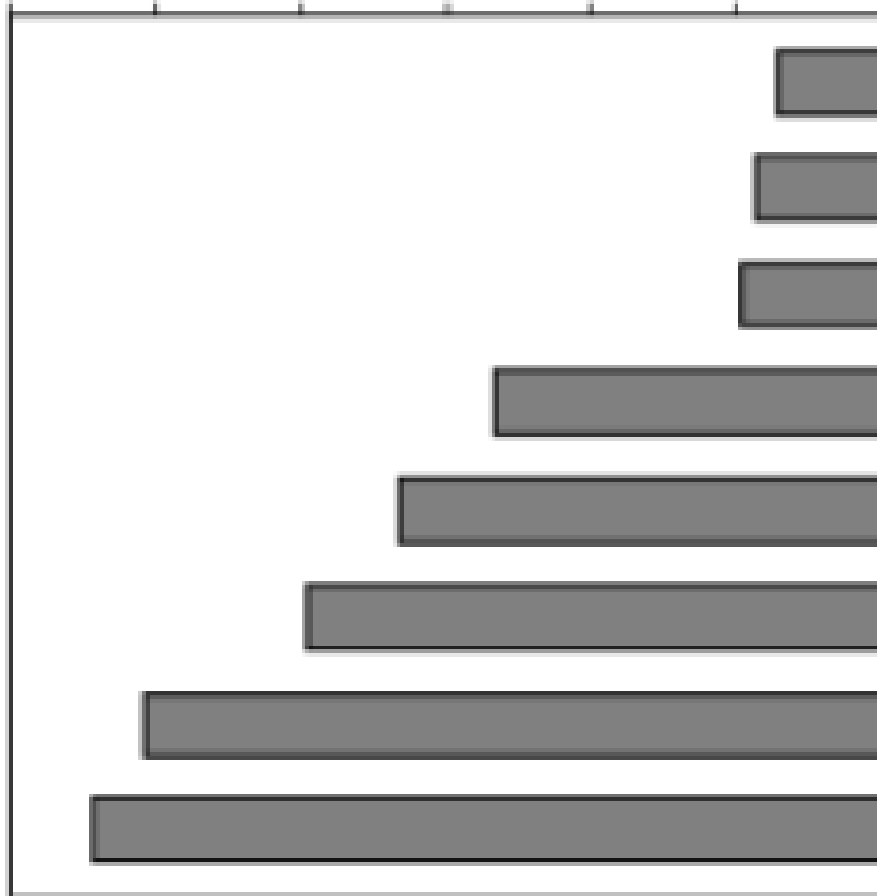
unnatural contaminants

genetic engineering

Rozin, 2005

自然性の減少(%)

60 50 40 30 20 10 0



自然同士の良い関係

物理的变化

家畜化

商業栽培化

自然同士のよくない関係

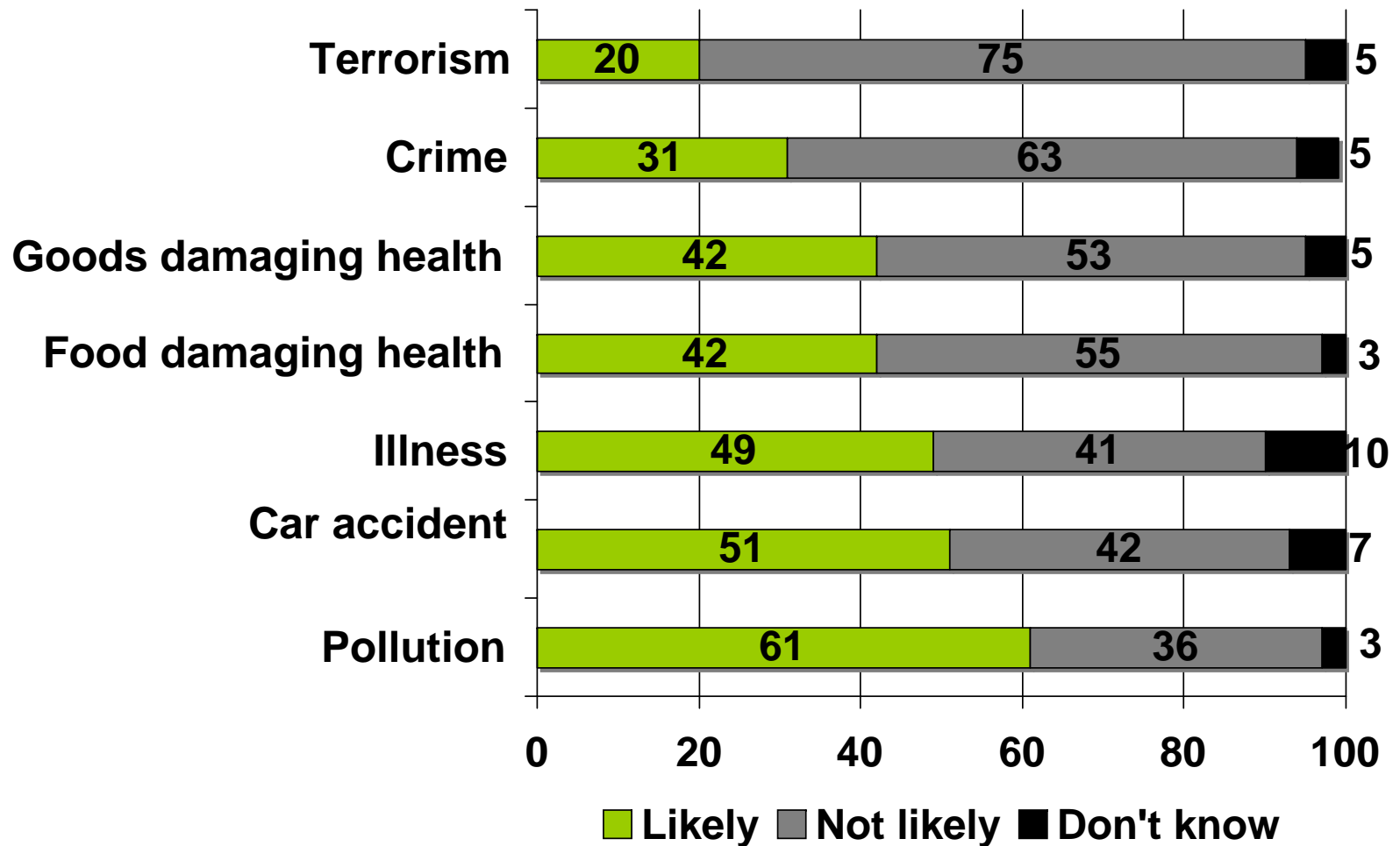
化学的变化

自然に存在しない汚染物質

遺伝子工学技術

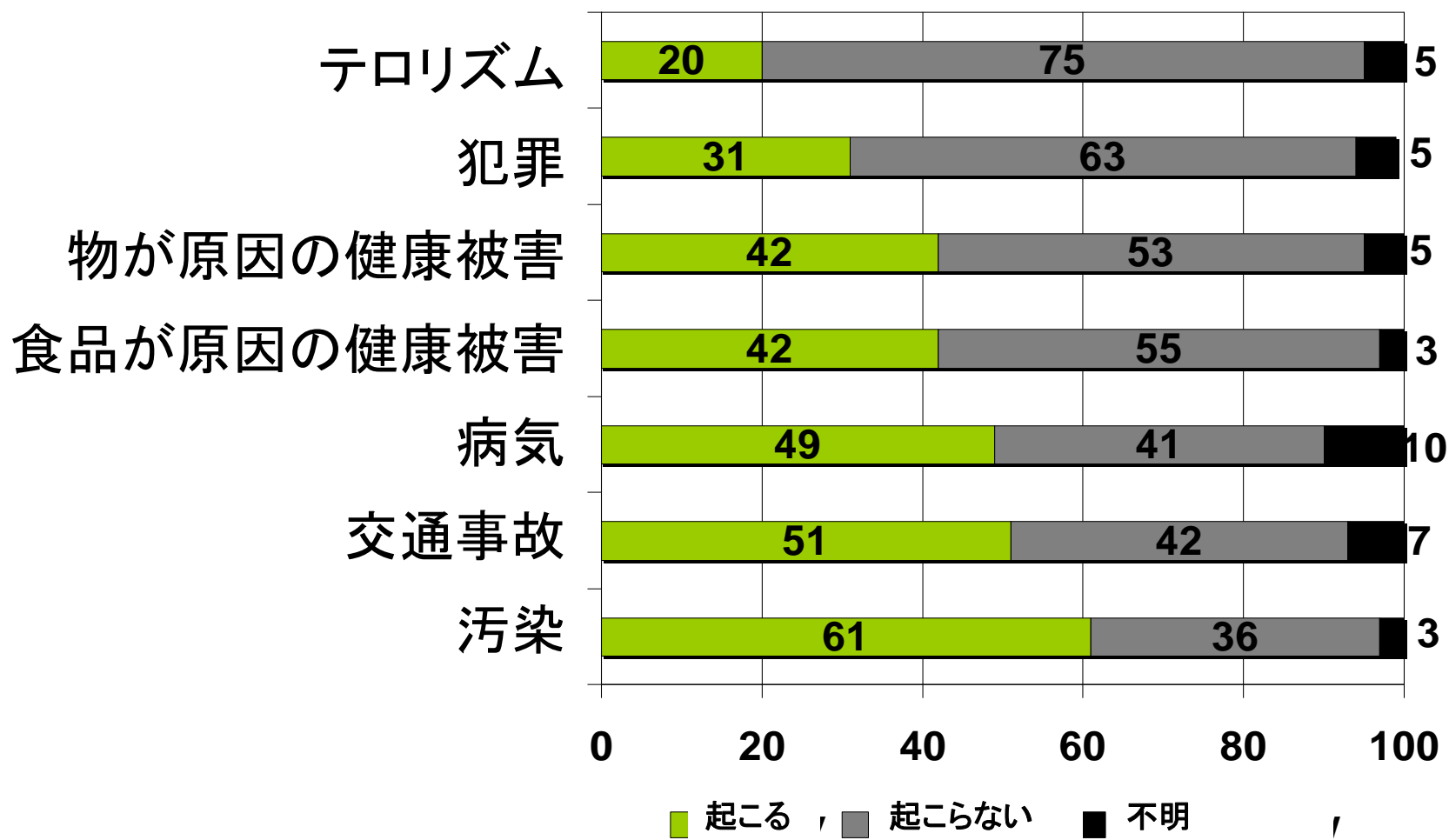
Rozin, 2005

“How likely to happen to you personally ?” Eurobarometer (2005)



あなたの身の上に、次の事柄がどの程度起こる
と思いますか？

ユーロバロメータ (2005)

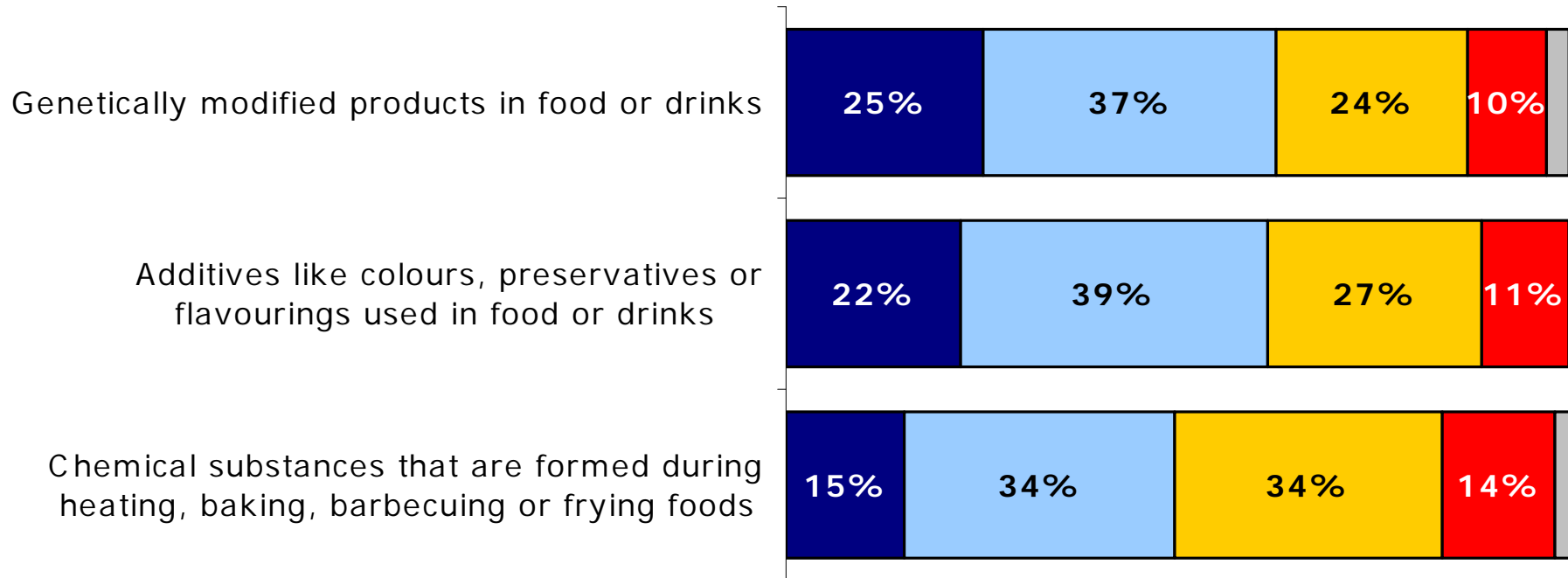


“Chemicals” in food

Q5. For each of the following issues, please tell me if you are very worried, fairly worried, not very worried or not at all worried by it?

%EU

■ Very worried ■ Fairly worried ■ Not very worried ■ Not at all worried ■ DK

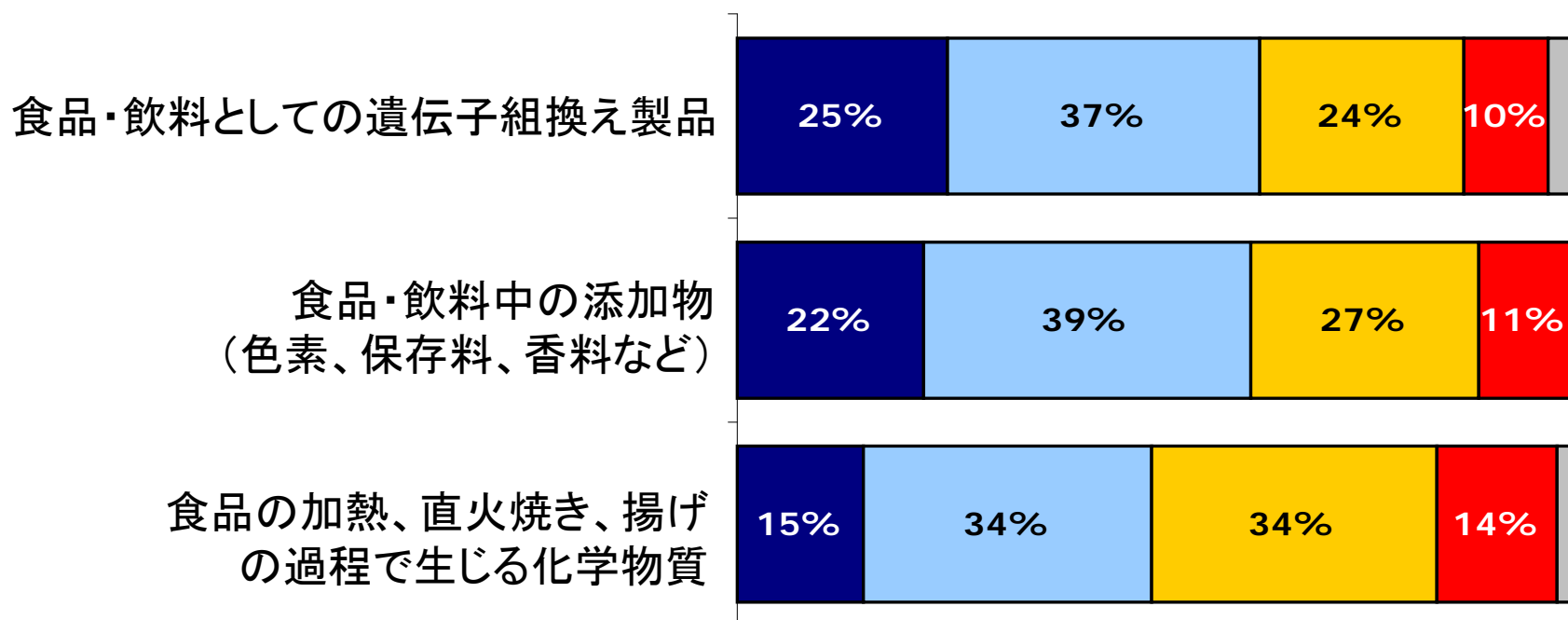


食品中の化学物質

Q5. 次の各事柄について、あなたはどのように思いますか？

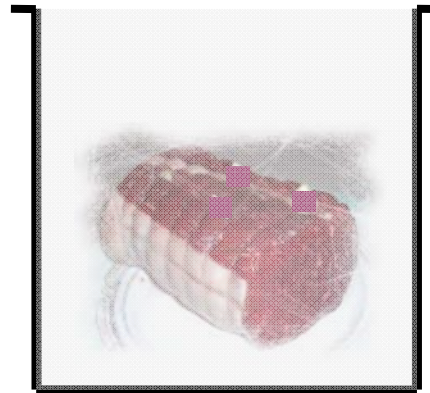
%EU

■ とても不安 □ かなり不安 ■ 少し不安 ■ まったく不安なし □ わからない

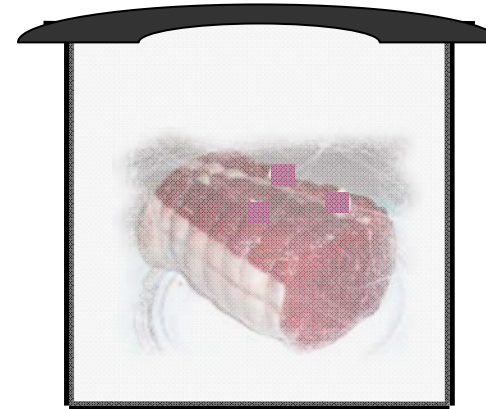


A thought experiment

Planche 1

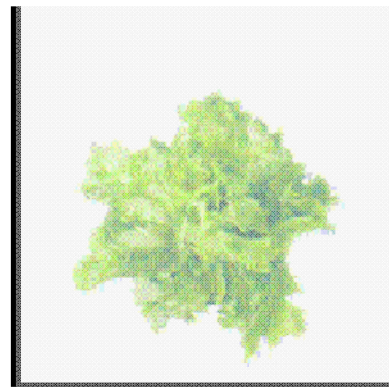


1

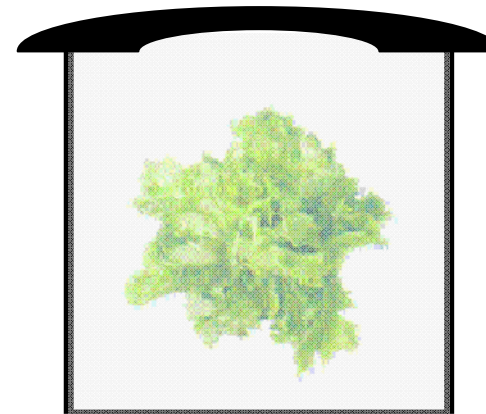


2

Planche 2



1



2

(Based on Redi's 1668 experiment)

思考実験

問題 1

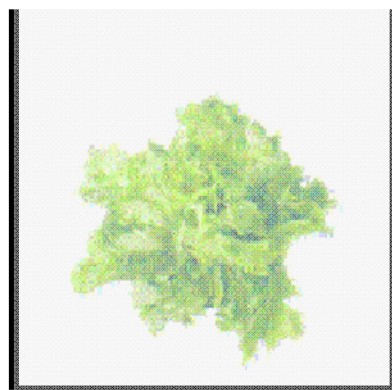


1

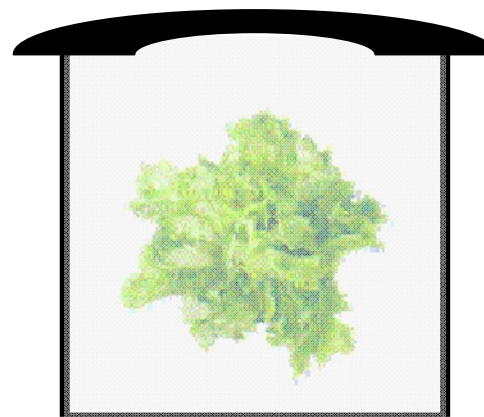


2

問題 2



1



2

(Rediが1668年に行った実験に基づく)

How dangerous is it to consume the following foods after several days in the fridge ?

-- : Not at all + : very dangerous

	--	-	0	+	++
Orange juice (opened bottle)					
Bread					
Jam, marmelade					
Fresh tomato					
Lettuce					
Raw carrots (grated)					
Carrot leftovers w. dressing					
Cooked veg.					
Beef (raw, from butcher)					
Roastbeef leftovers					
Chopped beef (butcher)					
Whole fish (from shop)					
Filetted fish (from shop)					
Breaded fish (from shop)					
Fish leftovers					
Whole chicken, raw (from butcher)					
Chicken leftovers					
Chicken breasts, raw (butcher)					
Offals, raw (liver, heart, kidneys, etc.) from butcher					
Pork chops, raw (butcher)					

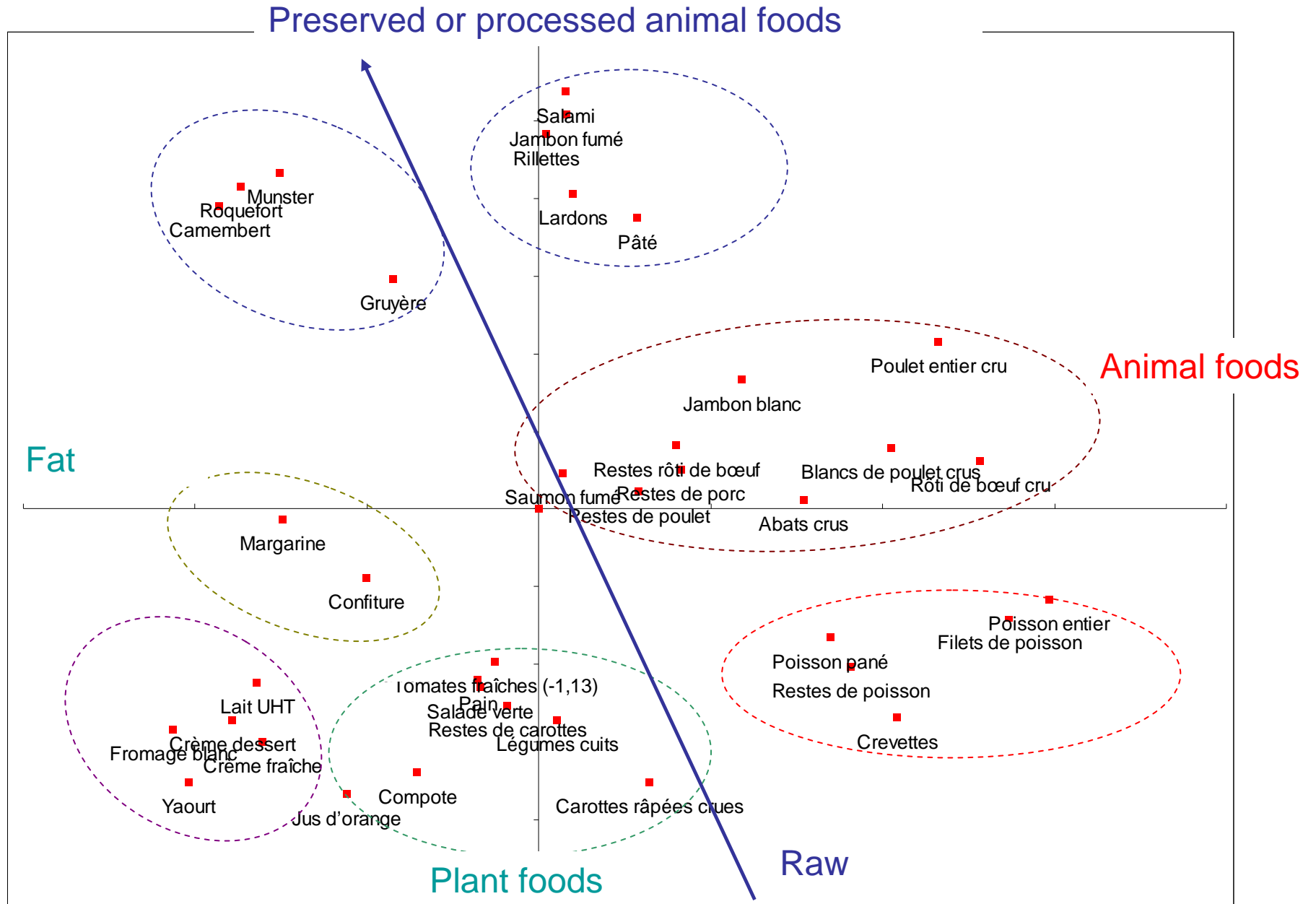
次の食品についてお聞きします。

冷蔵庫に入れてから数日経過した時点で飲食するとしたら、どの程度危険だと思いますか？

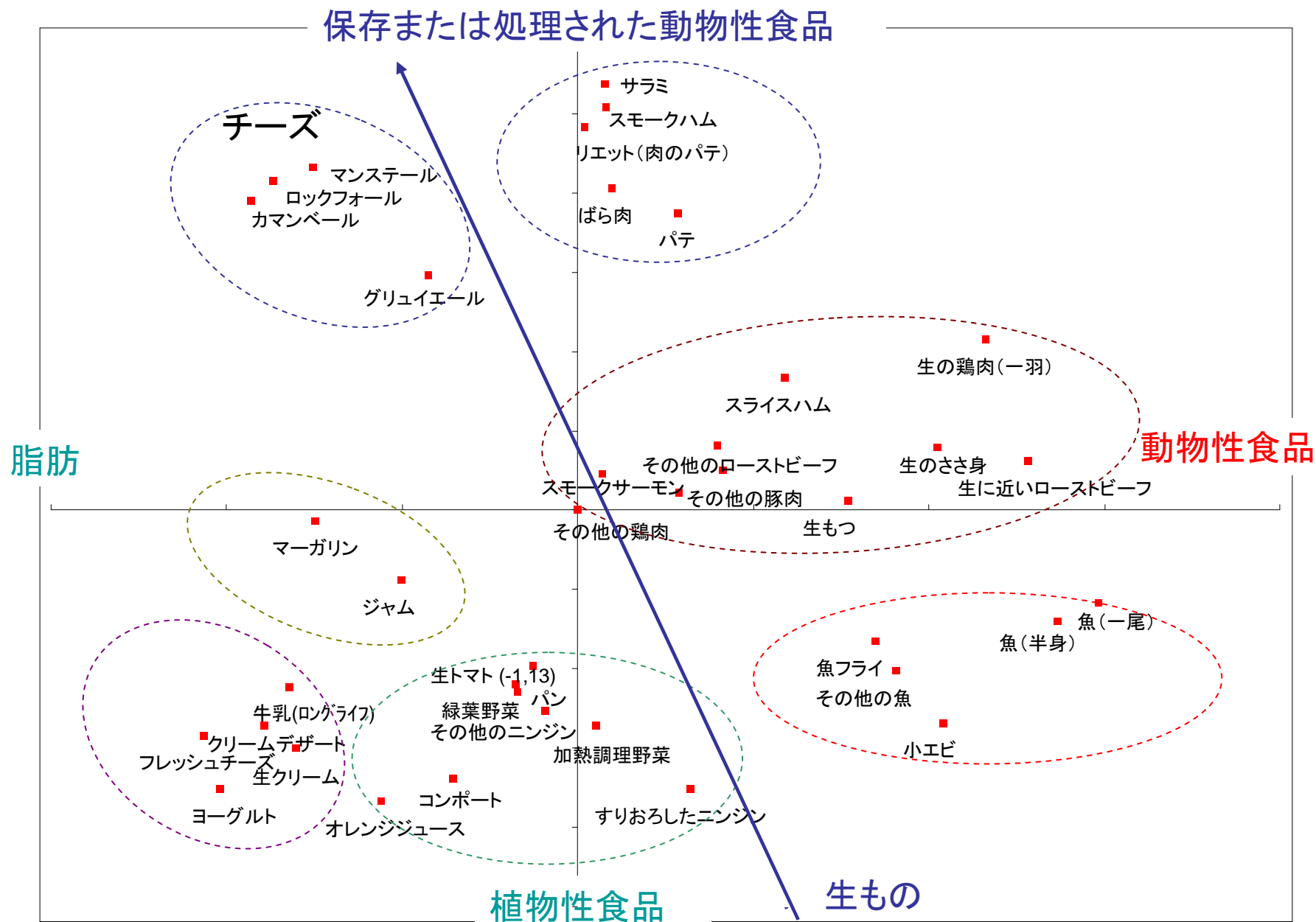
--:まったく問題ない ++:とても危険

	--	-	0	+	++
オレンジジュース（開封済）					
パン					
ジャム、マーメイド					
新鮮なトマト					
レタス					
生のニンジン（すりおろした状態）					
ニンジン（ドレッシングが付いた食べ残し）					
調理済みの野菜					
牛肉（肉屋で買った生肉）					
食べ残しのローストビーフ					
切り刻んだ牛肉（肉屋で）					
丸のままの魚（魚屋で購入）					
切り身の魚（魚屋で購入）					
パン粉をまぶした魚（魚屋で購入）					
食べ残しの魚					
生の丸ごと一羽の鶏肉（肉屋で購入）					
食べ残しの鶏肉					
生の鶏の胸肉（肉屋で購入）					
生の臓物（肝臓、心臓、腎臓など）（肉屋で購入）					
生の豚の切り身（肉屋で購入）					

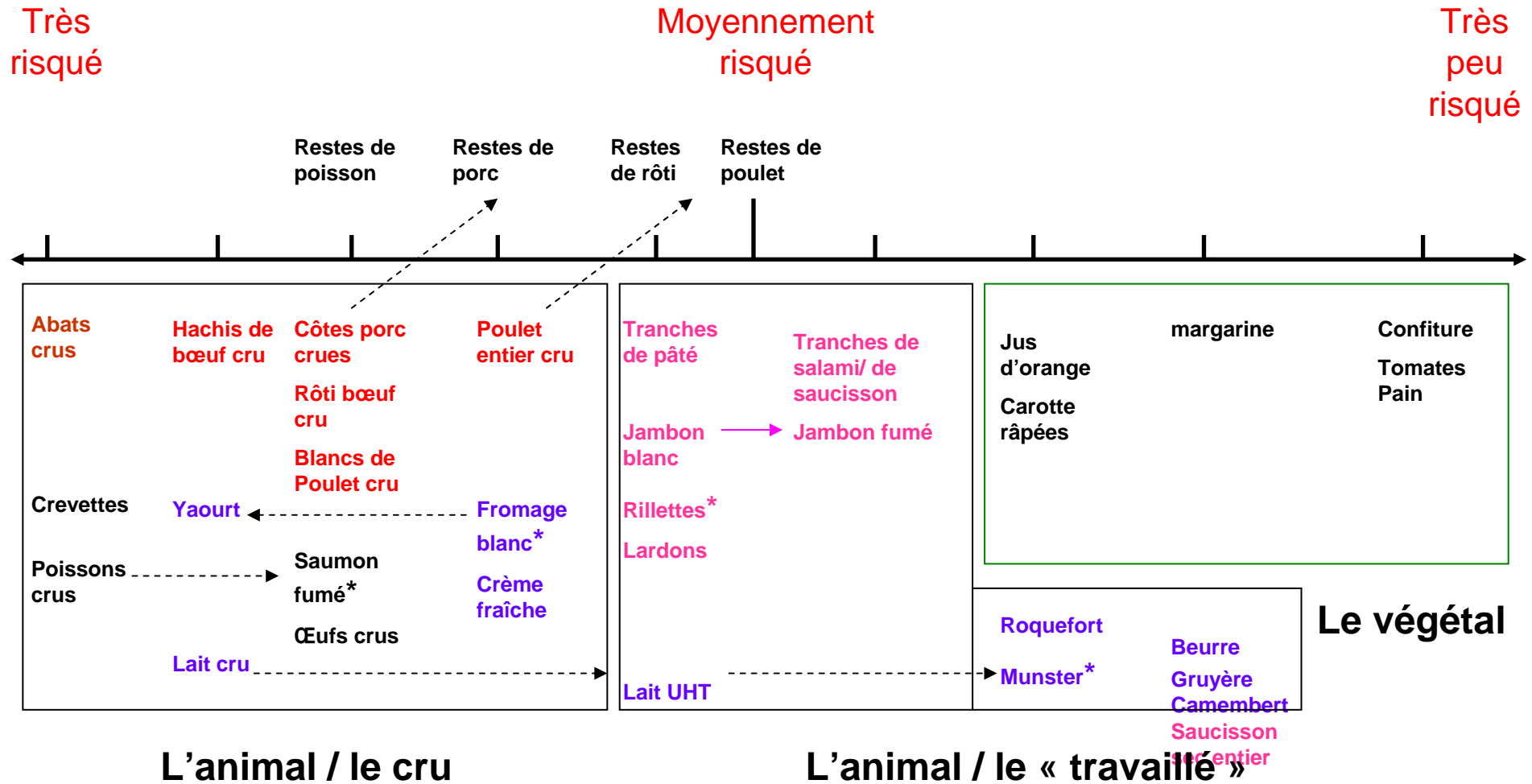
ACP – Perceived danger (n=363 lay people, incl. 130 « at risk »)



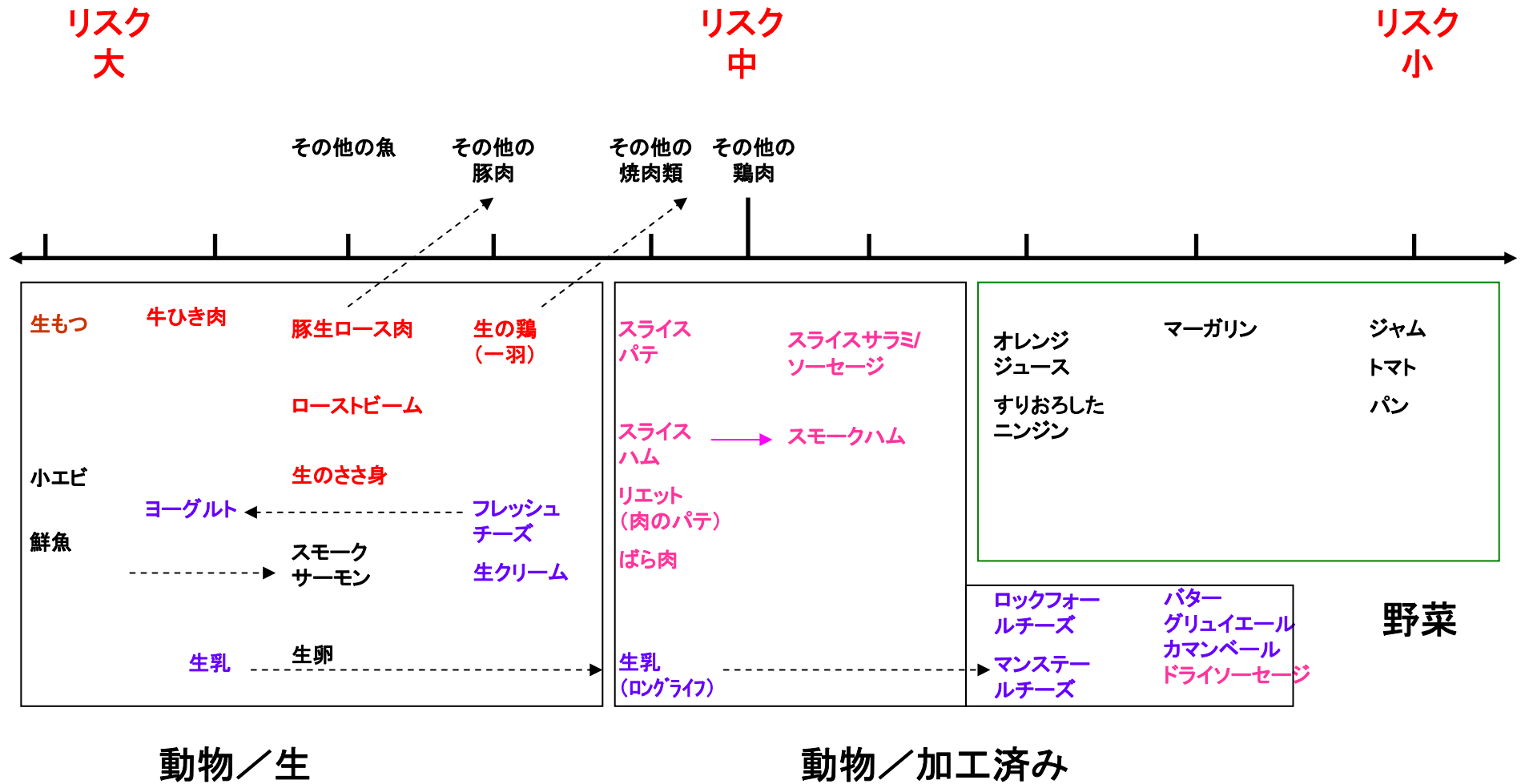
ACP – 認識された危険（一般人:n=363、そのうちat risk130人を含む）



Échelle des risques perçus par le profane



一般大衆のリスク認知度



The Problem With Processed...

- The natural superiority of « Natural »
- Most common complaint: « Who knows what we're eating »

処理されつつある問題・・・

- “自然”における本質的な優位性
- もっとも共通の不満：
「われわれが食べているものが何なのか、
誰も正確に知ることはできない」

The Consumer's Dilemma

- 1. I am what I eat
- 2. I have no idea what I 'm eating...
- 3. What/who am I?

消費者のジレンマ

- 1. 食は人を表わす
- 2. 私が今食べているものがわからない
- 3. 私は何？ 私はだれ？

2. Cultural variability and the “framing” of risk

2. 文化的多様性とリスクの「枠組み」

New York, 1930

“A New York, personne ne rentre chez soi au milieu de la journée : on mange sur place, soit dans les bureaux, tout en travaillant, soit dans les clubs, soit dans les cafeterias (...) Dans les bouillons populaires des milliers d'êtres alignés dévorent, chapeau sur la tête, sur un seul rang, comme à l'étable, des nourritures d'ailleurs fraîches et appétissantes, pour des prix inférieurs aux nôtres. Ils foncent sur leurs assiettes pleines de boules de viande ; derrière eux, on attend leur place.”

Paul Morand: New York (1930)

ニューヨーク, 1930

「ニューヨークでは昼には誰も帰宅しない。食事は働きながら事務所で、あるいは社員食堂であるいは街のカフェテリアで摂る。(中略) 大衆食堂で帽子も取らず、大勢がまるで家畜小屋のように横一列で、出来たての、食欲をそそる食物を一斉にむさぼる。料金は我々の相場よりも下だ。肉玉を山盛りにした皿に一斉に襲いかかる。後ろには席の空くのを待つ人々がいる」。

ポール・モラン(フランスの小説家):『ニューヨーク』(1930年)

Paris, 1954

“Frenchmen tend to be rigid in all matters associated with feeding. There is practically no variation in les heures de repas of any region, whereas for many non-Frenchmen feeding at precisely the same hour each day is associated rather with the zoo. There is little deviation as to which wine goes with which food, and few venture from established rules in order to "try something different." Even the conception of a well-composed meal (repas bien composé) is a distinctly Gallic idea with certain fixed features “

Daniel Lerner : « Interviewing the French »
The American Journal of Sociology, 62:2, 1956

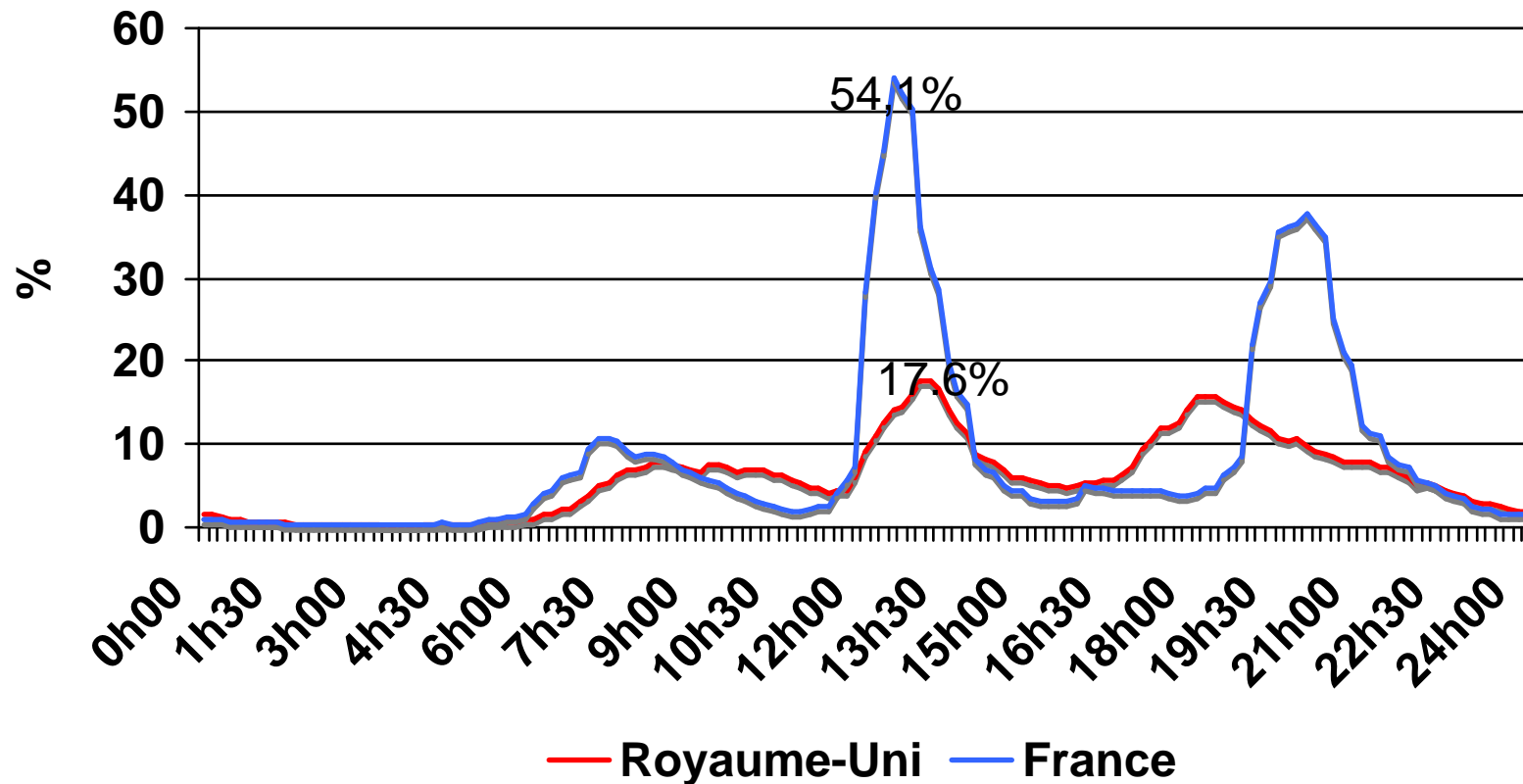
パリ, 1954

“フランス人は、食べることに関することとなると融通がきかなくなりがちである。毎日決まった時間に食事をするのが、フランス人以外の人にとっては動物園を連想させるのに対して、フランス人にとっては、たとえどの地域にいようと当たり前のことなのである。食事にはワインが付き物であるということも、ほとんど逸脱することはない。そして、何か違ったことをやってみるための新たな習慣をつくろうというような冒険は、ほとんどしない。よく構成された食事という着想でさえ、きわめてフランス風の考え方である。”

ダニエル・ラーナー：「フランス人へのインタビュー」

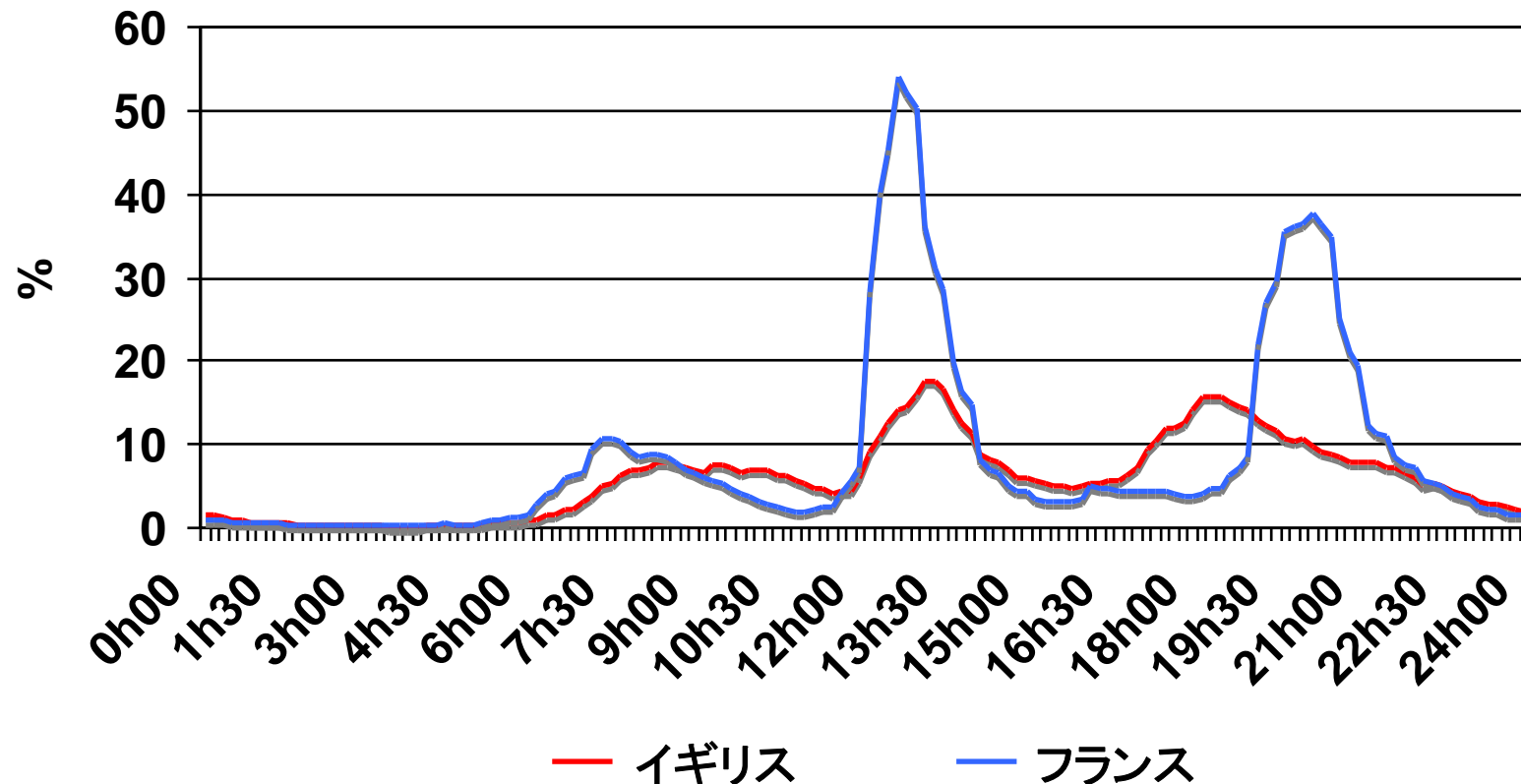
The American Journal of Sociology, 62:2, 1956

France vs UK



At 12.30, 54.1% of the French are eating; at 13.10, 17.6% of the British (de Saint Pol, 2007. Source: Time use survey, ONS, 2000 and Enquête emploi du temps, INSEE, 1998-99).

フランス 対 イギリス



昼の12時30分には、フランス人の54.1%が食事をしている。午後1時10分には、イギリス人の17.6%が食事をしている。

(de Saint Pol, 2007. Source: Time use survey, ONS, 2000 and Enquête emploi du temps, INSEE, 1998-99).

Table 1 Mean minutes and participation rates allocated to all activities within the 24-hour day, five countries, various dates, respondents aged 20–59

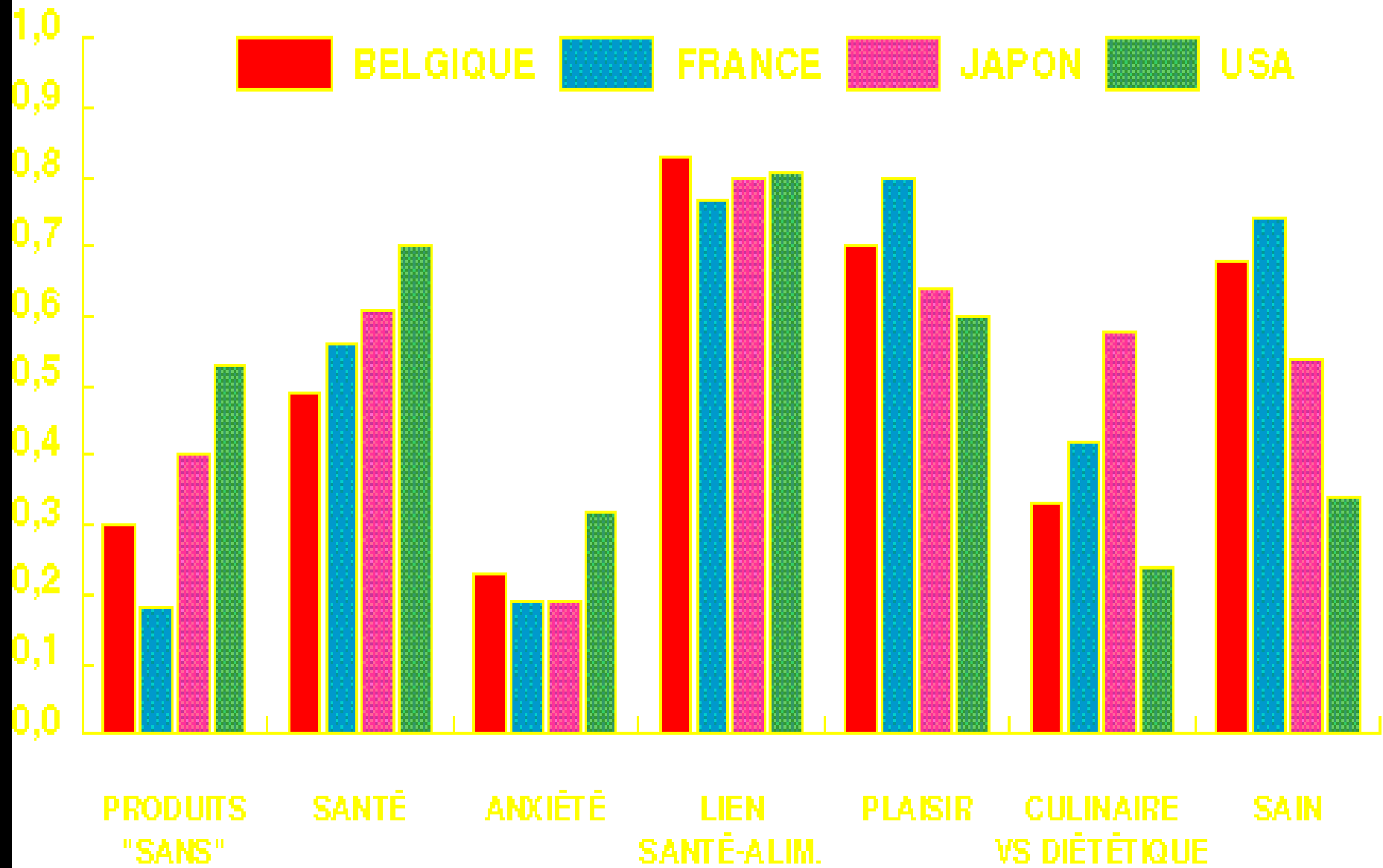
Activity	Mean minutes for all respondents		Participation rates (% of sample)	
UK	2000	1975	2000	1975
Cooking and washing up	51	57	88	72
Eating at home	54	79	97	99
Eating and drinking out	25	11	43	32
USA	1998	1975	1998	1975
Cooking and washing-up	39	48	56	62
Eating at home	42*	52	n/a	90
Eating and drinking out	30*	28	n/a	32
Norway	2000	1971	2000	1971
Cooking and washing-up	47	79	83	67
Eating at home	50	80	93	98
Eating and drinking out	14	8	17	12
Netherlands	1995	1975	1995	1975
Cooking and washing-up	51	61	94	87
Eating at home	66	76	99	99
Eating and drinking out	5	4	39	18
France	1998	1974	1998	1974
Cooking and washing-up	50	72	67	77
Eating at home	96	95	98	99
Eating and drinking out	30	15	27	23

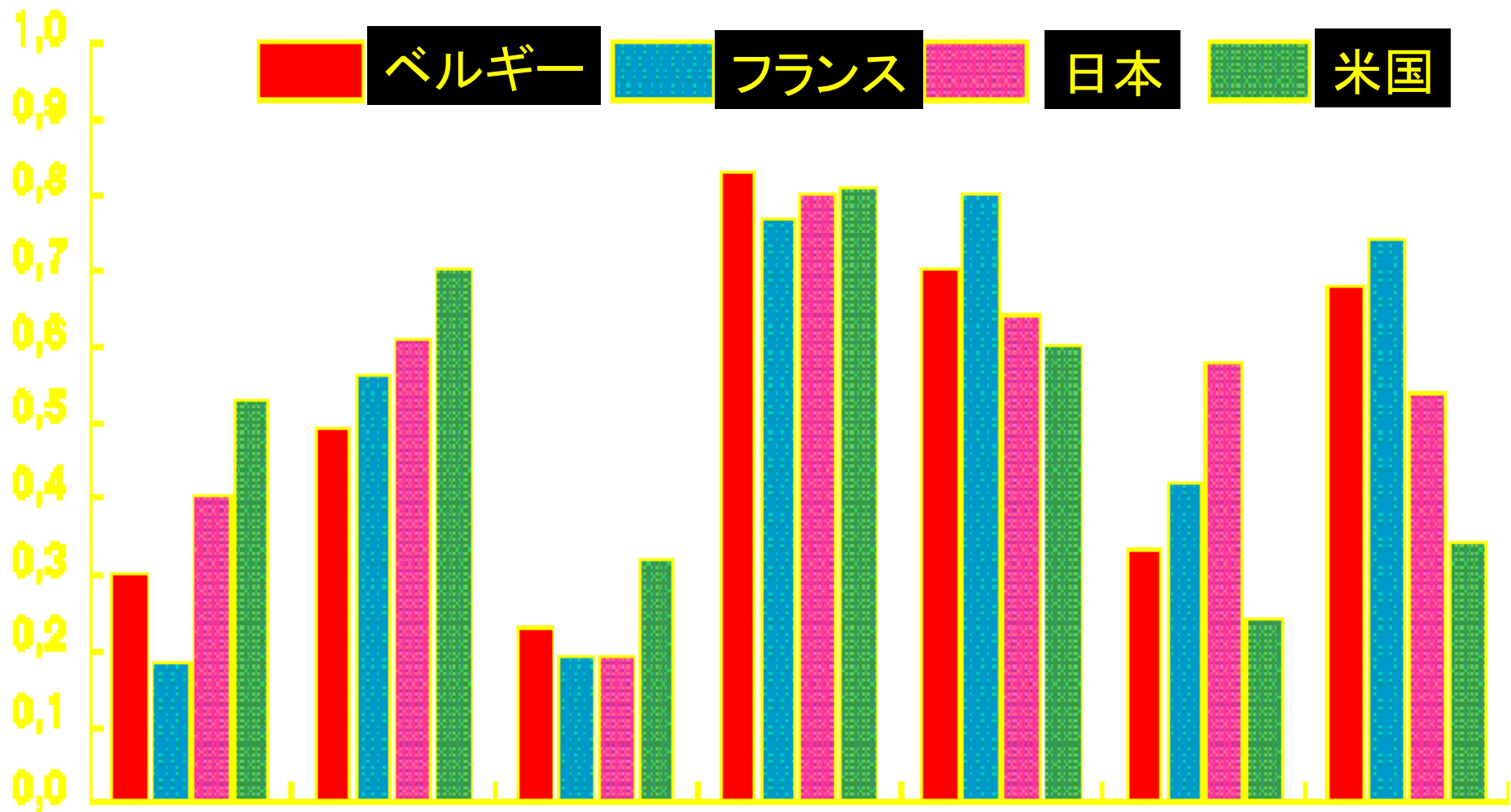
*In 1998, all eating was accounted for under the single heading 'Eating'. We therefore use an estimate.

Table 1 24時間以内に、すべての活動に割り当てられた平均時間(分)と、参加率(5カ国、期日は異なっている、参加者の年齢20-59才)

活動	全参加者の 平均時間(分)		参加率(%)	
英国	2000	1975	2000	1975
調理と食器洗い	51	57	88	72
家で食べる	54	79	97	99
外食する	25	11	43	32
米国	1998	1975	1998	1975
調理と食器洗い	39	48	56	62
家で食べる	42*	52	n/a	90
外食する	30*	28	n/a	32
ノルウェー	2000	1971	2000	1971
調理と食器洗い	47	79	83	67
家で食べる	50	80	93	98
外食する	14	8	17	12
オランダ	1995	1975	1995	1975
調理と食器洗い	51	61	94	87
家で食べる	66	76	99	99
外食する	5	4	39	18
フランス	1998	1974	1998	1974
調理と食器洗い	50	72	67	77
家で食べる	96	95	98	99
外食する	30	15	27	23

*In 1998, all eating was accounted for under the single heading 'Eating'. We therefore use an estimate.





「〇〇フリー」健康食品

不安

健康食品

喜び

料理法
vs
食養法

体に良い

A Cross-Cultural Survey Program

- Food, Health and the Body:
Perceptions, Attitudes and Beliefs

異文化調査

- 食品、健康、身体
: 認知、態度、信念

MANGER

FRANÇAIS, EUROPÉENS ET
AMÉRICAINS FACE À L'ALIMENTATION

À en croire les Américains, quand il s'agit de leur alimentation, les Français font preuve d'une étrange rigidité: ils mangent à heure fixe, veulent que les repas soient réglés comme papier à musique et passent toujours des heures à table.

Ce qui choque les Français, c'est que les Américains mangent à toute vitesse, souvent en travaillant, presque toujours en faisant autre chose et d'une façon bien peu conviviale.

Voici une grande enquête internationale sur les attitudes vis-à-vis de l'alimentation, du corps et de la santé, réalisée plusieurs années durant sur plus de 7 000 personnes. Une véritable radiographie, précise et fouillée, des « mangeurs » contemporains dans six pays occidentaux et quatre langues.

Au-delà de l'apparente homogénéisation des goûts, et de l'émergence d'un marché planétaire de la pizza et du hamburger, une plongée passionnante au cœur de nos différences culturelles.

Claude Fischler est sociologue et directeur de recherche au CNRS. Il est l'auteur de *L'Homnivore*, qui a été un grand succès.

Estelle Masson est maître de conférences en psychologie sociale à l'université de Brest.

Ils se sont associés à une douzaine de chercheurs qui ont travaillé en Allemagne, en Italie, en Angleterre, en Suisse et aux États-Unis notamment.

CLAUDE FISCHLER ESTELLE MASSON

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MANGER

FRANÇAIS, EUROPÉENS ET
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- 6 Countries: France, Switzerland, Italy, Germany, United Kingdom, United States
- Three Phases :
 1. Exploratory focus groups
 2. Qualitative/quantitative: Predominantly Open-Ended, CATI, 30-45 m
 - N=180 per country (60 general population, 60 teachers, 60 general practitioners)
 3. Quantitative (March-April, 2002) : Telephone Questionnaire, 15 m, N=6000

- 6カ国：フランス、スイス、イタリア、ドイツ、英国、米国
- 3段階：
 1. 予備的なフォーカスグループ
 2. 質的・量的調査：ほとんど無制限, CATI(電話調査；
Computer Assisted Telephone Interview), **30-45 m**
 - 各国とも **N=180** (60人の一般市民, 60人の教師, 60人の一般開業医)
 3. 量的調査 (3-4月, 2002)：電話による質問, **15 m, N=6000**

USA : Food Is Nutrition

“You can’t just look at food, you have to look at the difference between protein and carbohydrates (and so forth)...its not just food as one lump” (Gail, white collar group)

“You [speaking to CF] are acting like food is just one entity but our bodies don’t just need food, they need protein, they need carbohydrates, they need water...you can’t just look at your food as “OK, my body needs food”, because sometimes I’ll have a protein craving...”
(Linda, white collar group)

米国：食品は「栄養を摂取する」こと

「単に食べ物を考えれば済む話ではない。たとえば、タンパク質と炭水化物の違いなども見なければならぬ。食べ物は単なる塊りではない。」(ゲイル, white collar group)

「(CFに向かって…)あなたは食べ物が単なる物体であるかのように振舞っているが、人間のからだは単に食べ物を欲しているのではない。からだはタンパク質や炭水化物や水を必要としているのだ。あなたは、自分の食べ物を、“自分のからだは食べ物を欲しているのだ”と捉えることはできない。なぜなら、時々私は無性にタンパク質が食べたくなるからである。」(リンダ, white collar group)

USA: Food Is An *Individual* Matter

“I try to deal with my body, not nobody else’s...I ‘m not gonna eat like you and you’re not gonna eat like me... It ’s a question with the individual person himself. I have a choice in life for what I wanna eat, like she have a choice...everybody in this room got a choice about what they wanna eat.” (Toni, bc group)

“The choice is always mine; the choice is mine to have a nutritionally valuable meal as opposed to one laden with additives...but often I trade it off...the trade off is so easy...I also realize that it is my own choice, that I do this...” (Inga, wc group)

米国：食品は個人的なもの

「私は、自分のからだとうまく付き合いたい。私はあなたのように食べ物を食べようとは思わない。あなたも私のように食べようとは思わないだろう。これは私たち個人の問題である。私は、生きている間に食べたいと思うものについて、一つの選択をしている。きっと、他人がそうするように、この部屋にいるすべての人がそうするように。」(トニ, bc group)

「何を選択するかは、いつも私にかかっている。添加物をたくさん含んだ食事ではなくて栄養価の高い食事をとるという選択、・・・しばしば逆の選択をしてしまうこともあるが・・・それがまた容易にできるものだから・・・そしてその選択は自分自身が行い、行動に移してしまうということを自覚する自分がある。」(インガ, wc group)

France: Not All Eating Is Eating

« Parfois quand j'ai une course urgente à faire, *je ne mange pas* à midi, mais alors je m'achète un truc à la boulangerie que *je mange* dans la rue, sinon je ne tiens pas » Eléonore/28 ans

(Masson, 2001)

フランス：食べることだけが食事と
いうわけではない

「急ぎの用があるときなどは、お昼を摂らない。でも、パン屋さんで何か買って歩きながら食べるか、何も食べないこともある」。

エレノール(28歳)

(マソン、2001年)

« To Eat Well »

- to eat healthy / to make sure that you're not getting fat and cholesterol and sugar // to stay on a diet // also to not be hungry, if you eat healthy things often you're not hungry //
- good health and a long life // delaying illness // if your'e on the right diet then you function better and live longer // i think the downfall of the world is macdonalds / right diet - freshly prepared foods rather than deep fried and fast foods /
- nutritional / not very much meat / fish, salad, green beans, breakfast lunch and dinner, well balanced / well balanced diet, not so much fried food //
- eat what you like and how much you want // eat healthy / in moderation, fruits, vegetables, a good daily balance //
- it means you don't go to bed hungry and you share what you have with somebody else if they don't have it / when you eat meat and fish and vegetables, (that is high protein) / cakes and pies, things like that.i think that i would eat better at home
- eat nutritiously / eating all that is in the food triangle / a proper daily intake of starches, proteins, dairy products and so on // cook the food properly, that is no frying, steaming or baking //
- eating healthy / food that is good for you / such as vegetables //
- to have a balanced diet of fruit, vegetables, carbohydrates, and proteins, i think you need a balance of all of those things // to have enough to satisfy your hunger and maintain your health without being gluttonous // i think people drink to much pop//
- eat tasty foods / interesting spicy and fresh foods / that are healthy / fresh meats and vegetables // desserts / cakes and ice creams and pies //
- it means to eat foods that are proven to make our bodies healthier and not to overeat //
- eating in a nice place / clean, friendly people, good service, nice atmosphere, and in good company //

《 よく食べること 》

- 健康によいものを食べる / 脂肪、コレステロール、糖分を取り過ぎないようにする // 食事療法を続ける // しかし同時に、腹を空かさないようにすること、健康によい食べ物を食べていれば腹が減ることもない //
- 良好な健康状態と長寿 // 病気の進行を遅らせる // 適切な食事をとれば、からだの調子はよく、長生きする // 世界を破滅させるのはマクドナルドだと思う / 適切な食事ーそれはたっぷりの油で揚げたファーストフードよりも作りたての食事 /
- 栄養的 / ほどほどの量の肉 / 魚、サラダ、グリーン豆、朝食・ランチ・夕食、バランスのとれたもの / バランスのとれた食事、ほどほどの量の揚げ物 //
- 好きなものを好きなだけ食べる // 健康に注意して食べる / ほどほどに、フルーツ、野菜、毎日バランスよく //
- つまり、空腹の状態で寝ることはできないということ、あなたが食べようとする物を、もし誰かがまだ食べていなかったら、あなたはそれを彼らと分かち合う / あなたが肉、魚、野菜を食べるとき(つまり高タンパク質) / ケーキやパイ、あるいはそのようなもの、私は自宅で健康によい食事をしたいと思う
- 栄養豊富なものを食べる / 食のトライアングルに含まれるものすべてを食べる / スターチ、タンパク質、日常食品の毎日の適切な摂取 // 適切に調理する、油で揚げない、蒸さない、焼かない //
- 健康によいものを食べる / あなたによい食べ物 / たとえば野菜 //
- フルーツ、野菜、炭水化物、タンパク質などをバランスよく食べる、あなたにはバランスが必要だと思う // 空腹を満たすだけ十分に食べる、そして大食せずに健康を維持する // 炭酸飲料がたくさん飲まれていると思う //
- 味のよいものを食べる / 香辛料のきいた新鮮な食べ物 / それらは健康によい / 新鮮な肉と野菜 // デザート / ケーキ、アイスクリーム、パイ //
- つまり、からだを健康にすることが証明された食べ物を食べるということ、ただし食べ過ぎしないこと //
- 快適な場所で食べる / 清潔、友好的な人間、よいサービス、すばらしい雰囲気、よい友人と //

« Bien manger »

- manger sainement // en gardant aux aliments leurs qualités primordiales / **c'est convivial, se retrouver en famille** // c'est goûter à un tas de nouvelles choses //
- c'est de manger de façon variée et assez équilibrée et de temps en temps faire des extras / équilibrée c'est savoir faire son menu //
- un repas complet / entrée, plat de résistance, légumes et dessert // une bonne décoration que ce soit bien appétissant tant de l'odeur que du goût / bonne odeur et bon goût // la bonne quantité / qu'on n'ait plus faim après //
- c'est manger ce dont on a besoin quand on en a besoin // ce n'est pas forcément manger des choses très chères, c'est pouvoir manger de la viande, des fruits, des féculents quand on en a envie //
- c'est quelque chose de fin et d'équilibré, de goûteux, avec du plaisir à le déguster / avoir le temps d'être à table**, d'avoir un plat agréable à l'œil, pour son goût et par sa qualité, quelque chose de sain //
- c'est passer un bon moment // **c'est les réunions de famille autour d'une bonne table** / c'est l'ambiance et le fait de faire la fête // **c'est manger de la qualité / c'est manger des produits frais et naturels** comme les légumes, la viande /
- il faut manger pour vivre et non vivre pour manger / j'aime bien la bonne cuisine avec des ingrédients frais / fraîchement cueillis ou récoltés / **partager un moment de détente et de repos / moment de convivialité** //
- c'est déjà prendre son temps et apprécier ce qu'on mange, ne pas manger devant la télé par exemple // manger ce qu'on aime, se faire plaisir // apporter au corps ce dont il a besoin, cela peut être aussi **un bon repas entre amis** //
- prendre le temps / de savoir ce qu'on mange / des produits de qualité** // ne plus avoir faim / bien cuisiné // convivialité / **un bon repas entre amis c'est typiquement français** //
- avoir un certain plaisir** / ça apporte plein de bonnes choses, de l'énergie, les enfants grandissent // ça apporte une bonne santé / manger équilibré, pas trop de graisse / fruits, légumes, calcium //
- c'est manger des produits différents / essayer de tout manger, des produits du jardin, et ne pas se limiter à la nourriture rapide et toute faite par exemple McDonald's, Quick // c'est apprécier ce qu'on mange, c'est varier tous les goûts // **c'est se retrouver ensemble à table**

《 よく食べること 》

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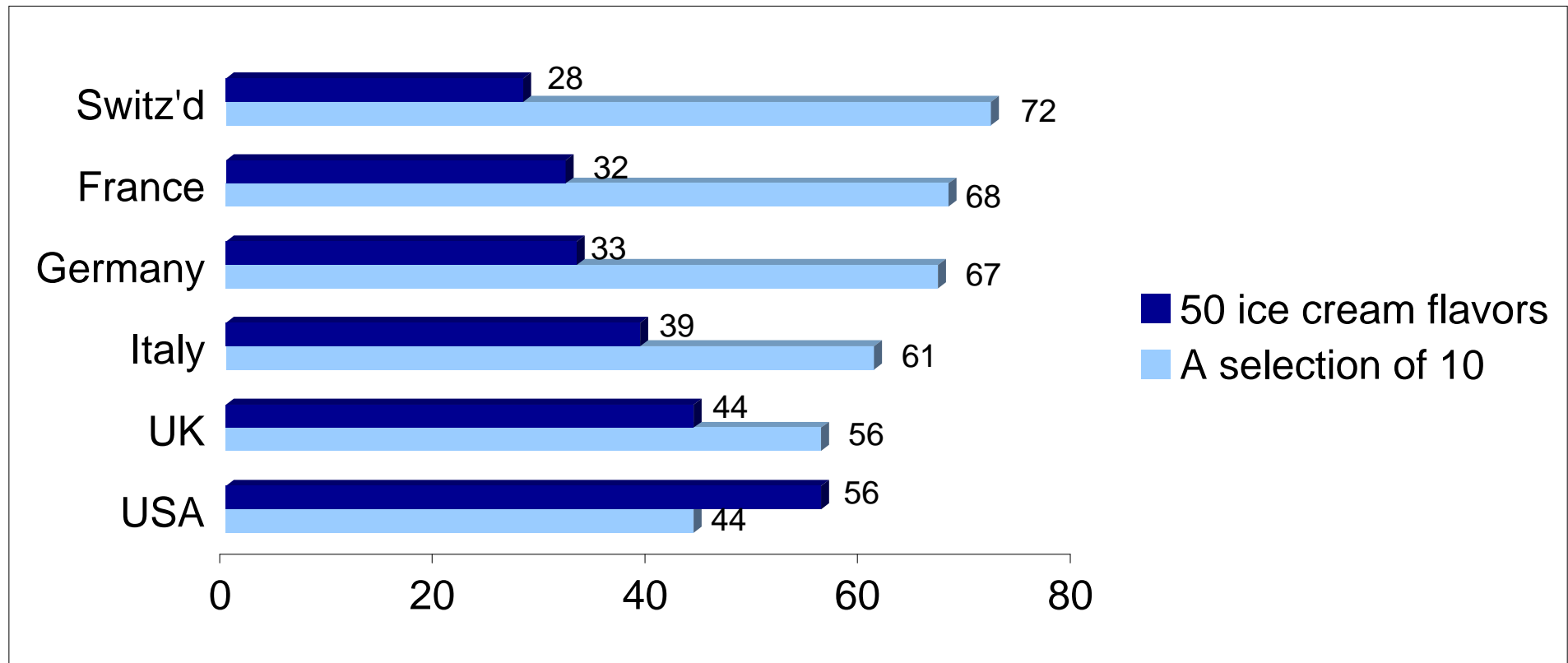
« Gut essen »

- Es beruhigt körperlich // es enthält die Vitamine //
- kein Fastfood / frisch zubereiten Salat und Gemüse aber auch Fleisch oder Fisch / ein Glas Wein / bewusst essen //
- Sich satt essen // so dass der Geldbeutel reicht // achten auf gesundes Essen // ct
- gesund ernähren //
- wenig Fleisch und mehr Gemüse und Obst essen / mit vielen Leuten essen / sich Zeit lassen beim Kochen / Rohkost essen
- Gesund // übertrieben // nicht sparsam // **pünktlich** // Magenbelastung
- Für mich heißt es abwechslungsreich // nicht zu fett // frisch // am besten vom Bauern // selbstgemachtes // Vergnügen und Unterhaltung //
- Zufrieden essen** // genossen zu haben //
- Nicht überfressen / seinen Teller leer essen aber nicht reinstopfen //
- große Auswahl // nicht norddeutsch fetter Geschmack // italienische Küche ist sehr gut //
- bewusst essen / **einmal im Monat richtig schlemmen mit Freunden in der Gaststätte** //
- Zeit dazu zu haben** // reichlich Auswahl // natürliche Produkte zubereiten //
- Zeit zu haben** // in Ruhe essen // Auswahl // gut verdauen //
- alle zusammen mit Kinder und Enkel und Urenkel** / Salat / Käse / Fisch / Rotwein / Baguette /
- Zeit zu haben mit Freunden zusammen in Gesellschaft zu Essen** / naturbelassen mediterran ohne Schnickschnack //
- wenn es schmeckt / es nicht zu kalorienreich ist / leicht bekömmlich //
- regelmäßig essen // zu einer bestimmten Uhrzeit // nicht zu fettig // abwechslungsreich
- Wenn meine ganze Familie da ist, haben wir Zeit zum schlemmen** / in aller Ruhe essen / ganz egal was es ist
- Kartoffelsuppe und Knöpfe, guter Geschmack, muss satt machen //

《 よく食べること 》

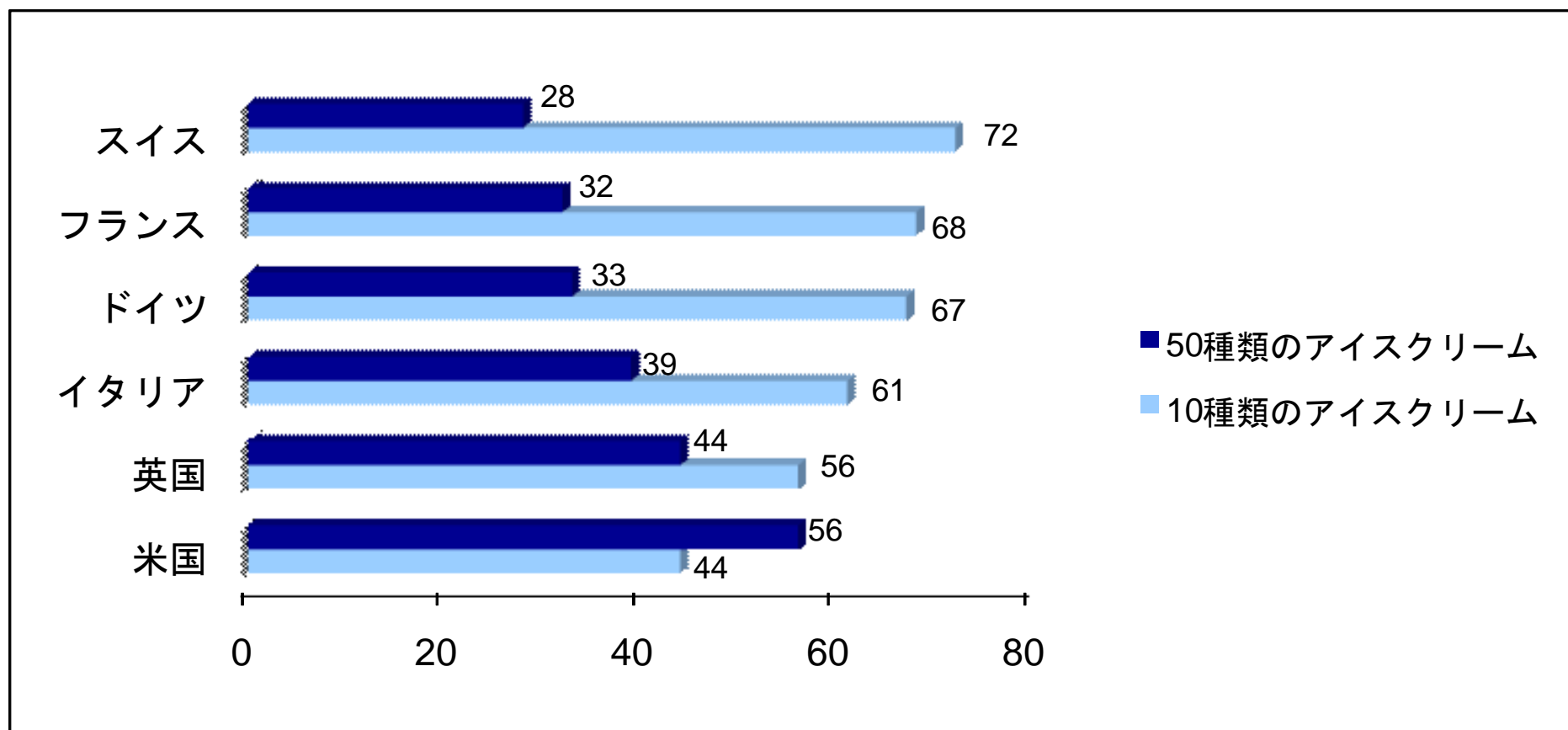
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- Kartoffelsuppe und Knöpfe, guter Geschmack, muss satt machen //

Maximal choice?



You want to eat ice-cream. You have a choice between two ice-cream parlors. One offers 50 flavors, the other a selection of ten. Which of the two do you prefer (prices equal) ?

選択肢の最大化



アイスクリームを食べる場合を考えてみよう。2つのアイスクリーム店があると想定する。一方の店には50種類の味があり、もう一方は10種類を提供する。どちらの店に行きたいと思うか（価格は同じとする）？

Free Choice vs Communion

How do people in various cultures accept individual dietary peculiarities ?

- Medical avoidances
- Ethical or religious avoidances
- Dislikes or distastes

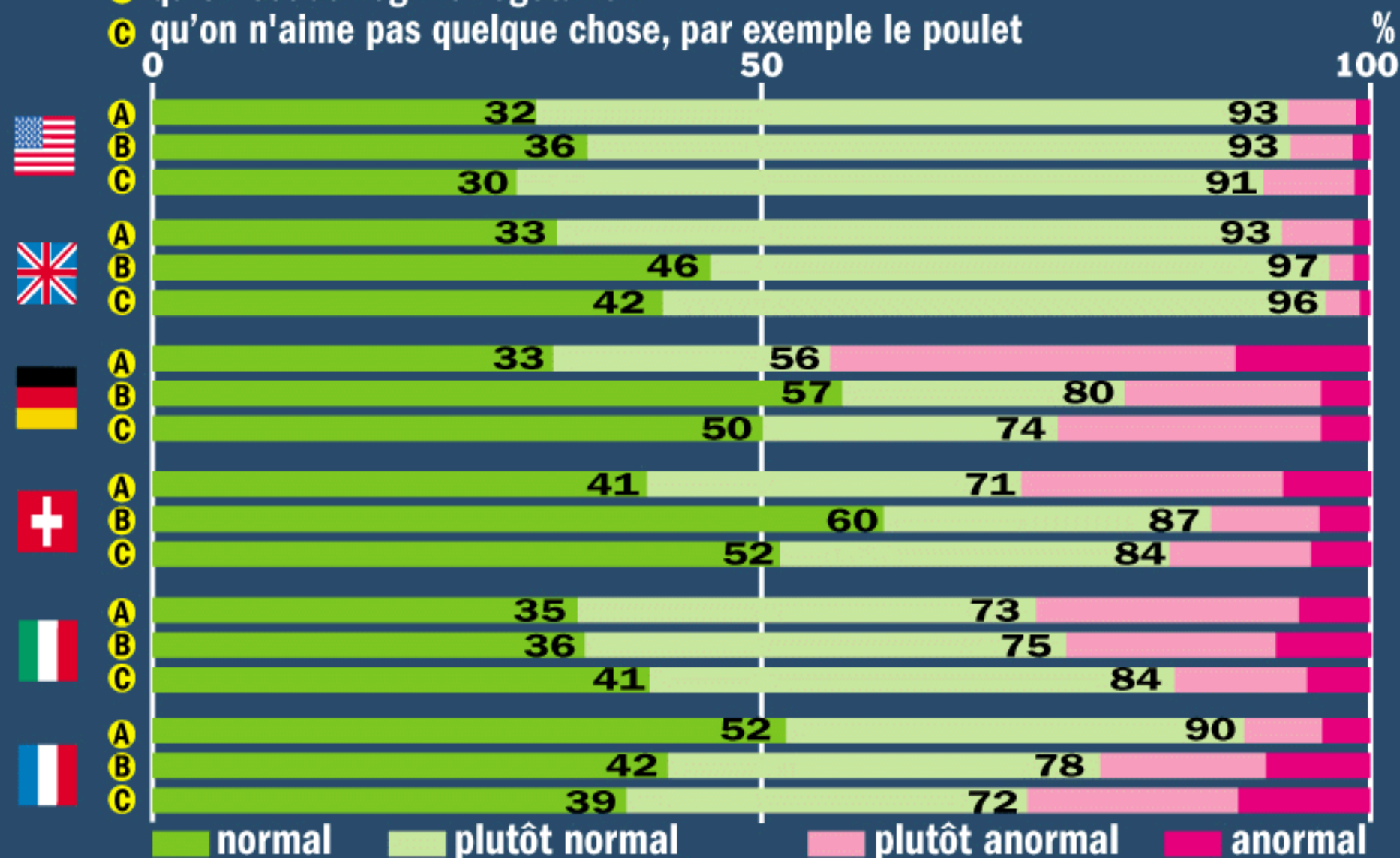
自由選択 vs 共有

さまざまな文化圏に住む人々は、
どのようにして各々の食事の特異性を
認めているのか？

- 医学的回避
- 倫理的、宗教的回避
- 反感または嫌悪

Invitations : perception de l'exception individuelle

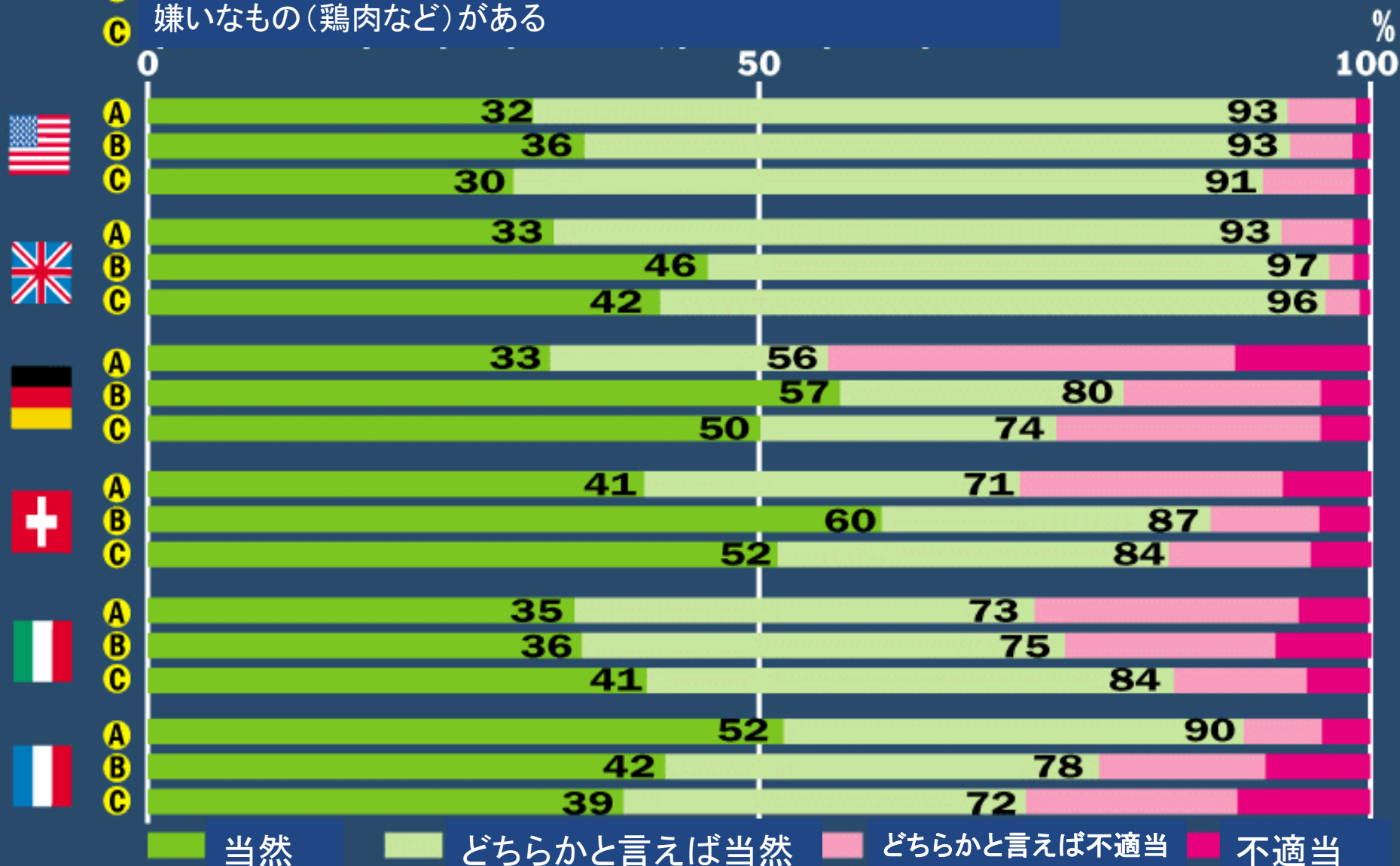
- A** Est-il normal de prévenir : qu'on est au régime sans sel
- B** qu'on est au régime végétarien
- C** qu'on n'aime pas quelque chose, par exemple le poulet



N=6023 personnes

食事に招待されたとき、食事制限・嗜好に関する以下のことを告げるのは当然？

- A** 塩分を控えている
- B** 菜食主義者である
- C** 嫌いなもの(鶏肉など)がある



N=6023 personnes

Metaphors

Suppose you need to find a simple metaphor to describe the relation between the body and food ... The body is like:

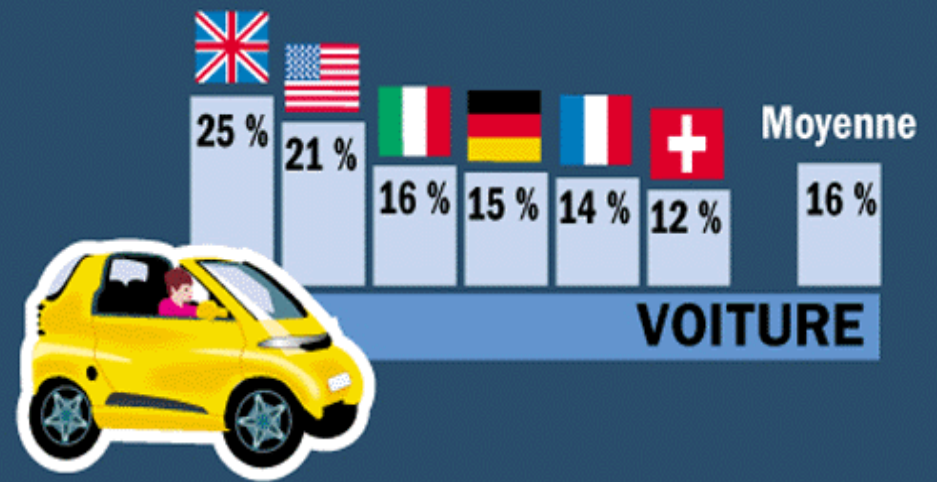
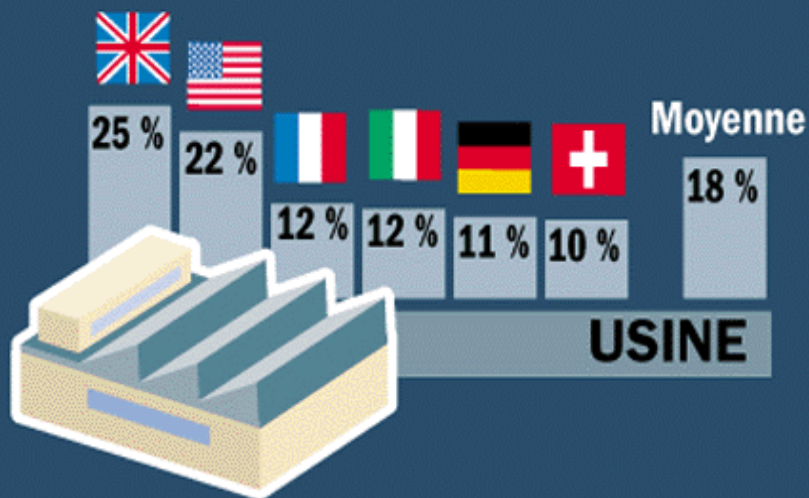
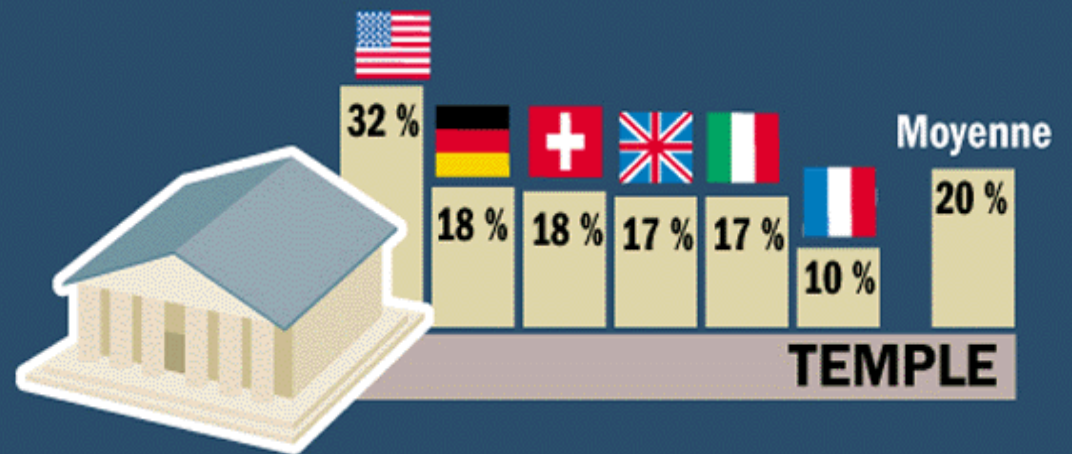
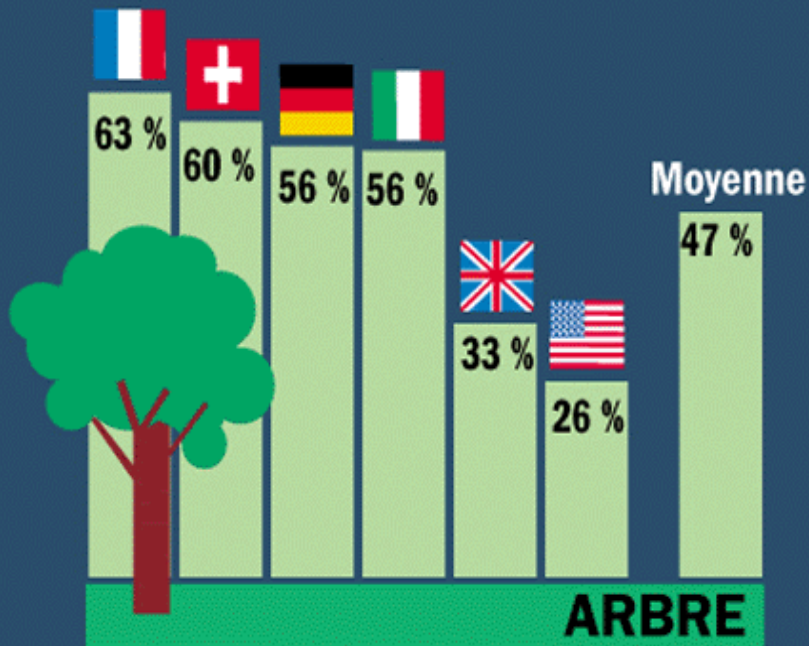
- A tree
- A factory
- A Car
- A Temple

比喩

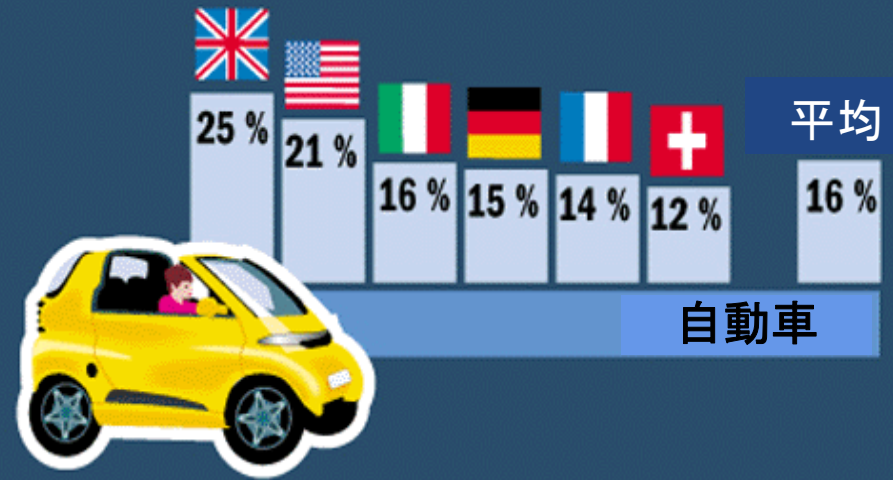
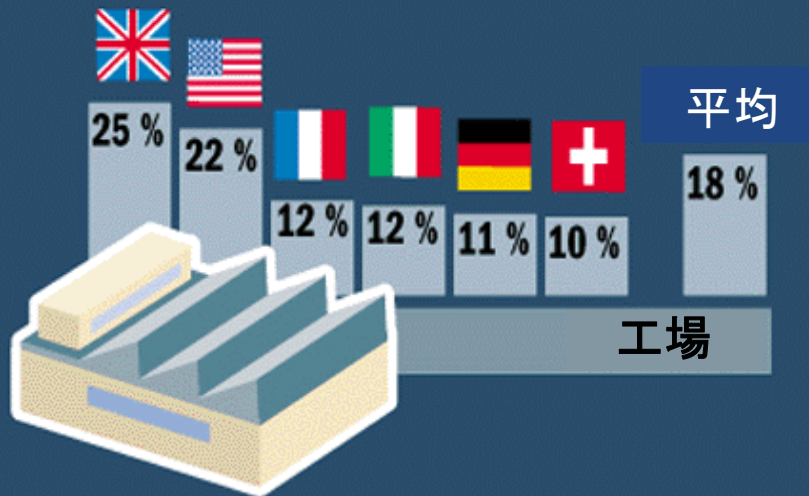
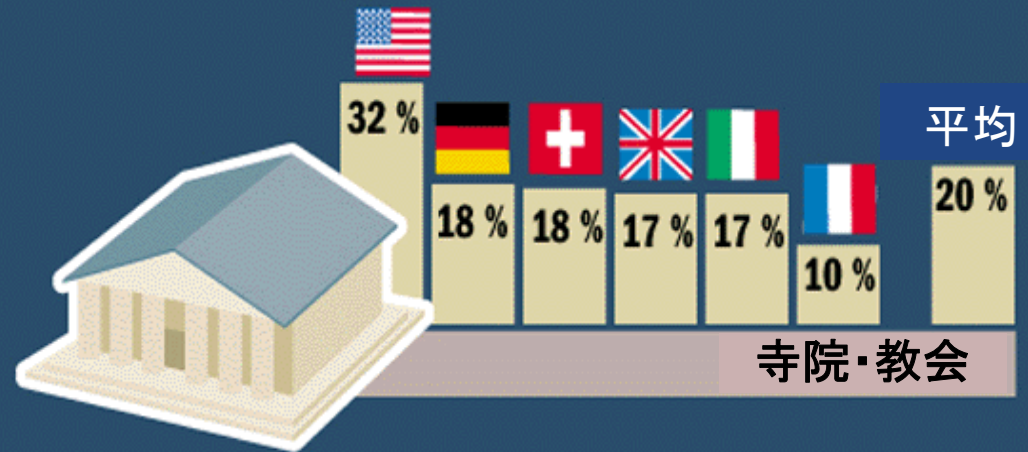
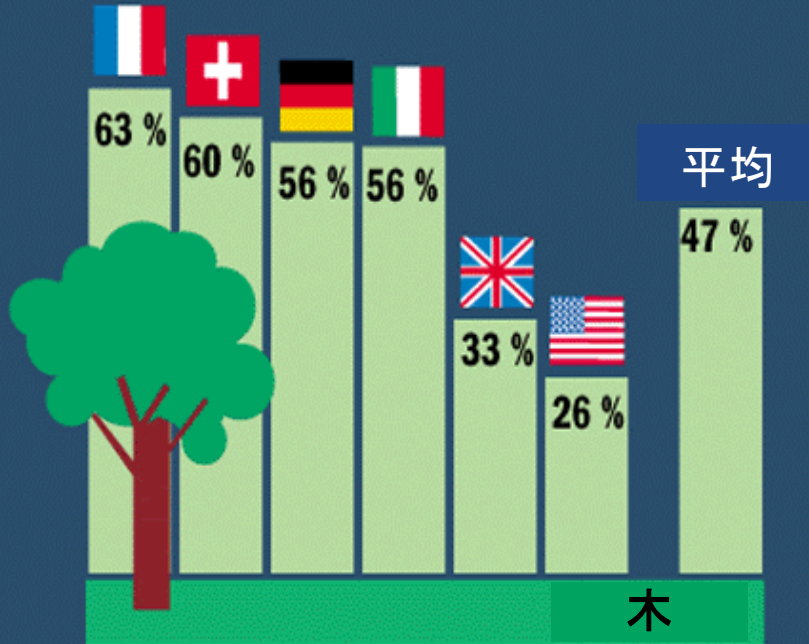
身体と食べ物との関係を説明するために、
簡単な比喩を用いるとするならば、……
身体は次のうち何にたとえられるか？

- 木
- 工場
- 自動車
- 寺院・教会

Les métaphores du corps



身体は何にたとえられるか？



Worlds Apart? The Reception of Genetically Modified Foods in Europe and the U.S.

George Gaskell,^{1*} Martin W. Bauer,² John Durant,³ Nicholas C. Allum¹

Recent controversies about genetically modified foods in the United Kingdom and several other European countries highlight the apparent differences that exist in public opinion on this subject across the Atlantic. Why are people in the United States seemingly untroubled by a technology that causes Europeans so many difficulties? The results of survey research on public perceptions of biotechnology in Europe and the United States during 1996–1997, together with an analysis of press coverage and policy formation from 1984 to 1996, can help to answer this question.

An international study of biotechnology in the public sphere (1) sheds some light on why genetically modified (GM) foods are so much more controversial in Europe than in the United States. Here, we compare public perceptions of five applications of modern biotechnology and look for explanations for the differences between Europe and the United States in terms of media coverage, trust in the regulatory process, and scientific literacy.

In October 1996 a representative sample survey (about 1000 respondents per country) was conducted in all 15 member states of the European Union, together with Norway and Switzerland (henceforth "Europe"). The key questions were also used in a U.S. survey in late 1997 (2). These surveys were conducted 2 to 3 years ago and over a period of roughly a year; hence, our data provide a historical snapshot of public perceptions in 1996–1997. Of course, with the rapid advance of food biotechnologies and other developments in the life sciences (such as the cloning of Dolly the sheep), we would not expect to find the same opinions and attitudes in 1999. But the use of similar questions in the surveys makes it possible to look at comparative structural differences in the pattern of public perceptions that may hold clues to understanding the situation in 1999.

Respondents were asked whether they thought each of five biotechnologies—genetic testing, GM medicines, GM crops, GM food, and xenotransplantation (GM animals for use in human transplantation)—was useful, risky, morally acceptable, and to be encouraged (2). Figure 1 shows the mean levels of support (encouragement), on a scale from

+2 to -2, for all the applications.

People in Europe and the United States showed varied levels of support across the different applications. GM medicines and genetic testing received the most support, GM crops and GM foods received intermediate support, and xenotransplantation received the least support. There was not always strong support for biotechnology in the United States; for example, the average U.S. respondent was opposed to xenotransplantation. Moreover, U.S. respondents were not always more supportive than European respondents; for example, Europeans were more supportive of genetic testing, whereas people in the United States were significantly more supportive of GM crops and GM foods than were people in Europe.

When the surveys were conducted, biotechnology was a relatively unfamiliar topic. On the questions about the five applications, 19% of the U.S. respondents and 27% of the European respondents did not give a complete set of responses. With this level of unfamiliarity, we can assume that some people responded to the questions with "nonattitudes" (3). Such responses would be likely to be volatile if, for example, the issue became more controversial. To this extent we must be cautious in our interpretations of and extrapolations from the survey results. In the absence of a filter question allowing us to exclude those people with "no opinion" (4), the following anal-

ysis uses only those who gave a full set of responses, on the assumption that they were more likely to have better formed opinions. Judgments of use, risk, moral acceptability, and encouragement were each collapsed into a dichotomy (useful/not useful, and so forth) so as to model patterns of response (henceforth "logics") over the four dimensions of attitude. This produces 16 possible combinatorial logics (Table 1), but empirically only three were widely used.

Logics 1 and 2 are similar in being supportive, but they display different perceptions of risk. For the "supporter," risk is not an issue. The "risk-tolerant supporter" sees but then discounts the risk. Opponents take a position exactly opposite to that of supporters.

Table 2 shows the distribution of these three prevalent logics for each application. For GM medicines and genetic testing, supporters constituted the single largest category. Levels of risk-tolerant support were also relatively high, and levels of opposition were relatively low. Greater opposition to genetic testing in the United States ($P < 0.05$) than in Europe may indicate a sensitivity about genetic privacy in the context of work, credit, or insurance. In contrast, for xenotransplantation, supporters and risk-tolerant supporters totaled only 36% in Europe and 42% in the United States, with about 33% in opposition.

Turning to GM crops and GM foods, we see a contrast between Europe and the United States. Both GM crops and GM foods were better supported in the United States than in Europe (for both contrasts, $P < 0.05$). For both applications, there were fewer supporters and more opponents in both the United States and Europe. The contrast is greatest in the case of GM foods, to which 30% of Europeans were opposed.

A fourth possible logic—"moral opponents" (in the context of Table 1, answers =

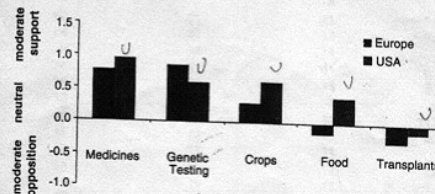


Fig. 1. Mean support for five applications of biotechnology. The United States and Europe differ significantly for each application (F values from one-way analyses of variance for each application were all significant at $P < 0.05$).

¹Methodology Institute, ²Department of Social Psychology, London School of Economics, London W8 2AE, UK. ³The Science Museum, Exhibition Road, London SW7 2DD, UK.

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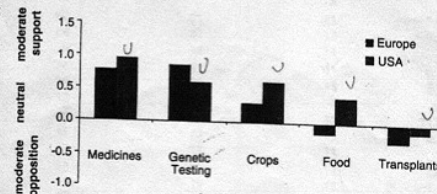


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Table I. Mean rating of worry across 14 food risk by country.

Mean rating of worry across 14 food risks (1 = not at all worried to 4 = very worried)					
	Mean	S.D.		Mean	S.D.
Sweden	2.3	0.50	France	2.7	0.57
Netherlands	2.3	0.53	Slovenia	2.7	0.55
Finland	2.4	0.54	Luxembourg	2.7	0.61
Estonia	2.5	0.62	Portugal	2.7	0.67
Slovakia	2.5	0.57	Hungary	2.8	0.67
Austria	2.6	0.56	Lithuania	2.8	0.66
Spain	2.6	0.74	Latvia	2.8	0.69
Ireland (Rep)	2.6	0.68	Poland	2.9	0.55
Belgium	2.6	0.57	Malta	2.9	0.65
Denmark	2.6	0.60	Italy	3.0	0.57
Czech Rep	2.6	0.63	Greece	3.0	0.62
Great Britain	2.6	0.60	Cyprus	3.0	0.65
Germany	2.6	0.65	EU Total	2.7	0.64

表I. 食品14種類のリスクに関する不安の平均評価値(国別)

食品14種類のリスクに関する不安の平均評価値
(1=まったく不安を感じない~4=大いに不安を感じる)

	平均値	標準偏差
スウェーデン	2.3 0.50	フランス 2.7 0.57
オランダ	2.3 0.53	スロベニア 2.7 0.55
フィンランド	2.4 0.54	ルクセンブルク 2.7 0.61
エストニア	2.5 0.62	ポルトガル 2.7 0.67
スロバキア	2.5 0.57	ハンガリー 2.8 0.67
オーストリア	2.6 0.56	リトアニア 2.8 0.66
スペイン	2.6 0.74	ラトビア 2.8 0.69
アイルランド共和国	2.6 0.68	ポーランド 2.9 0.55
ベルギー	2.6 0.57	マルタ 2.9 0.65
デンマーク	2.6 0.60	イタリア 3.0 0.57
チェコ共和国	2.6 0.63	ギリシア 3.0 0.62
英国	2.6 0.60	キプロス 3.0 0.65
ドイツ	2.6 0.65	EU全体 2.7 0.64

HohlおよびGaskell(2007年)

Better taste in the past ?

Compared to 40 or 50 years ago, would you say that our foods today...

%	Germany	USA	France	UK	Italy	Swzd	Global
Taste worse	33.2	24.0	61.1	30.6	52.8	43.7	39.2
Taste the same	40.8	31.9	24.0	22.5	18.0	26.5	27.7
Taste better	26.0	44.1	14.9	46.9	29.2	29.8	33.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

N=6032 $\chi^2=583.5$ $ddl=10$ $p=0.001$

昔のほうがおいしかったか？

40～50年前と比較して、現在の食品をどう評価するか？

%	ドイツ	米国	フランス	英国	イタリア	スイス	全体
味が落ちた	33.2	24.0	61.1	30.6	52.8	43.7	39.2
同じ	40.8	31.9	24.0	22.5	18.0	26.5	27.7
おいしくなった	26.0	44.1	14.9	46.9	29.2	29.8	33.1
合計	100.0	100.0	100.0	100.0	100.0	100.0	100.0

$N=6032$ $\chi^2=583.5$ $ddl=10$ $p=0.001$

Healthier in the past ?

Compared to 40 or 50 years ago, would you say that our foods today are :

%	Germany	USA	France	UK	Italy	SwitzÖd	Global
Less healthy	60.1	51.0	56.0	45.0	70.7	57.9	56.2
As healthy	21.6	19.4	18.5	16.7	12.0	22.5	18.6
More healthy	18.3	29.6	25.5	38.3	17.3	19.6	25.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Chi2=220.3 ddl=10 p=0.001

昔のほうが健康的だったか？

40～50年前と比較して、現在の食品をどう評価するか？

%	ドイツ	米国	フランス	英国	イタリア	スイス	全体
健康的でなくなった	60.1	51.0	56.0	45.0	70.7	57.9	56.2
同じ	21.6	19.4	18.5	16.7	12.0	22.5	18.6
健康的になった	18.3	29.6	25.5	38.3	17.3	19.6	25.3
合計	100.0	100.0	100.0	100.0	100.0	100.0	100.0

$\chi^2=220.3$ $ddl=10$ $p=0.001$

Framing of Worry & Outrage

- Different countries, different “framing”:
- US (UK, Northern Europe ?)
 - Individual control
 - Health and nutrition
- Europe
 - Substantialist worries
 - Perceived decline of taste and quality of foods
 - Perceived decline of commensalism
 - Environmental framing
 - “politisation”: metaphor of general corruption

不安と反感の枠組み

- 国が違くと「枠組み」も異なる
- 米国（英国と北欧も？）
 - 個人が管理する
 - 健康と栄養補給
- 欧州
 - 実体論者の不安
 - 食品の味と品質が落ちたという認識
 - 共に食事を楽しむ習慣がなくなってきたという認識
 - 環境面の枠組み
 - 「政治化」: 全体的な墮落の比喩