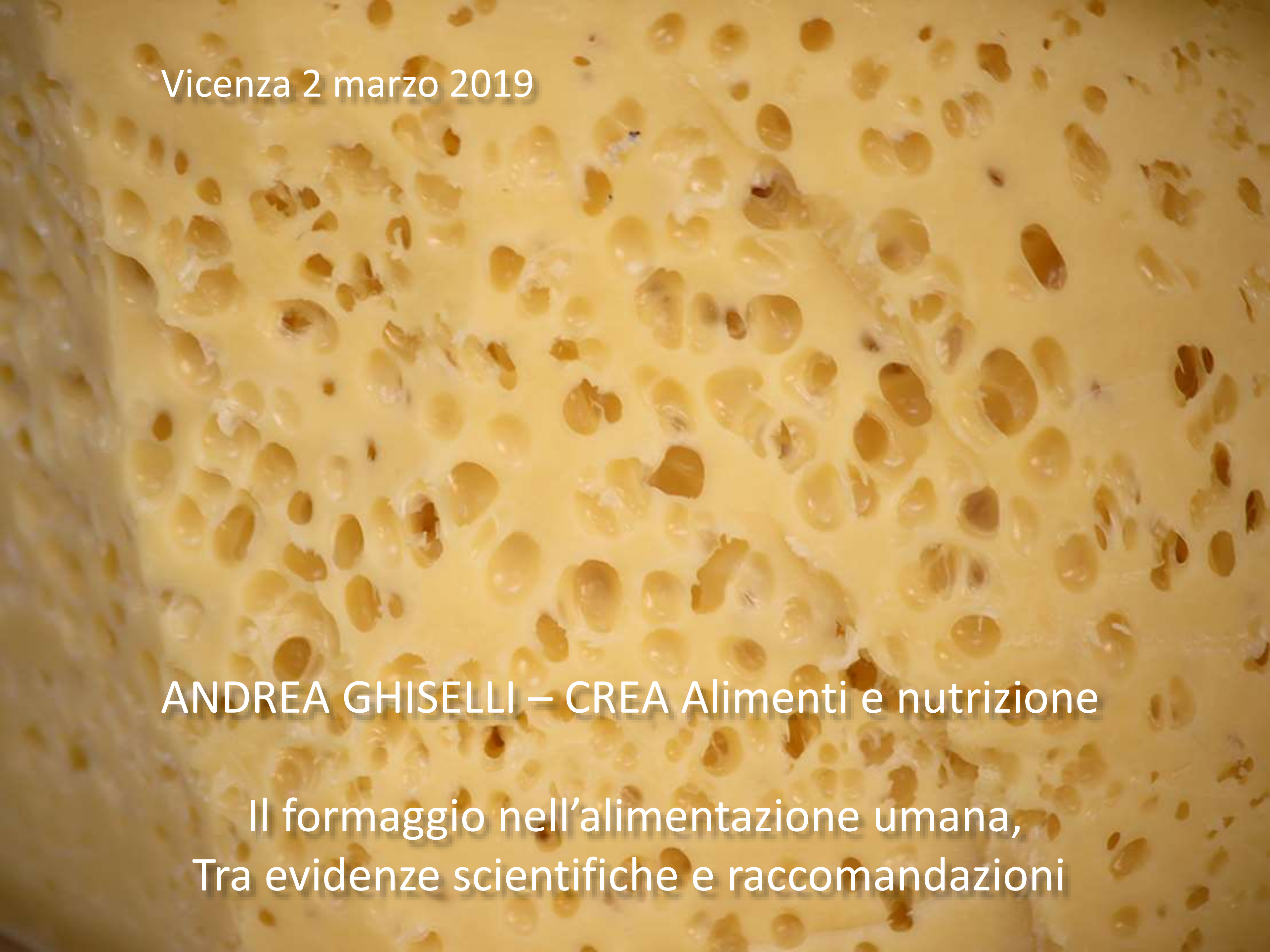


Vicenza 2 marzo 2019

ANDREA GHISELLI – CREA Alimenti e nutrizione

Il formaggio nell'alimentazione umana, Tra evidenze scientifiche e raccomandazioni

Gli elementi nutritivi del formaggio

- **Proteine**
  - GABA
  - Lattoferrina
  - Peptidi
    - Antipertensivi, Antiossidanti, Antimicrobici, Anticancerogeni, Immunopeptidi
- **Grassi**
  - Acidi grassi a catena dispari
  - CLA
- **Minerali**
  - Ca, P, Na, Zn, I
- **Vitamine**
  - A, D, B1, B2, B12
- **Probiotici**
- **Carboidrati**
  - Poco lattosio

Ma non solo cosa c'è dentro

Contenuto e costi del calcio di alcuni alimenti

* fonte prezzi http://shop.auchan.it

	Alimento	Calcio (mg/100 g)	Prezzo (€/ Kg)* al netto scarti	Energia (kcal/100 g)	Costo energetico (Kcal/mg Ca)	Costo (cent/mg Ca)
Vegetali	Salvia	600	48,67	116	0,19	0,81
	Rosmarino	370	48,67	96	0,26	1,32
	Rucola	309	11,14	28	0,09	0,36
	Basilico	250	48,67	39	0,16	1,95
	Mandorle	240	22,9	603	2,51	0,95
	Prezzemolo	210	9,9	20	0,10	0,47
	Menta	210	73	41	0,20	3,48
	Fichi secchi	186	4,2	256	1,38	0,23
	Cicoria	150	1	12	0,08	0,07
	Spinaci	78	5	31	0,40	0,64
	Broccolo verde ramoso	82	1,86	24	0,29	0,23
Frutta secca in guscio	Nocciole	150	34,5	655	4,37	2,30
	Mandorle	240	22,9	603	2,51	0,95
Legumi	Ceci secchi	142	4,98	316	2,23	0,35
	Fagioli	135	4,7	291	2,16	0,35
Prodotti della pesca	Ostriche	186	87	69	0,37	4,68
	Sgombro in salamoia	185	11	224	1,21	0,59
	Acciughe	148	4,19	96	0,65	0,28
	Calamaro o polpo	148	16	68	0,46	1,08
	Cozze	88	9,8	84	0,95	1,11
Acque	Acqua Ferrarelle	40	0,27	0	0,00	0,07
	Acqua Lete	32	0,33	0	0,00	0,10
	Acqua Sangemini	33	0,48	0	0,00	0,15
Latte	Latte intero	120	1	64	0,53	0,08
	Latte p. scremato	120	1	46	0,38	0,08
	Grana padano	1169	13,8	406	0,35	0,12
	Asiago	870	9,34	359	0,41	0,11

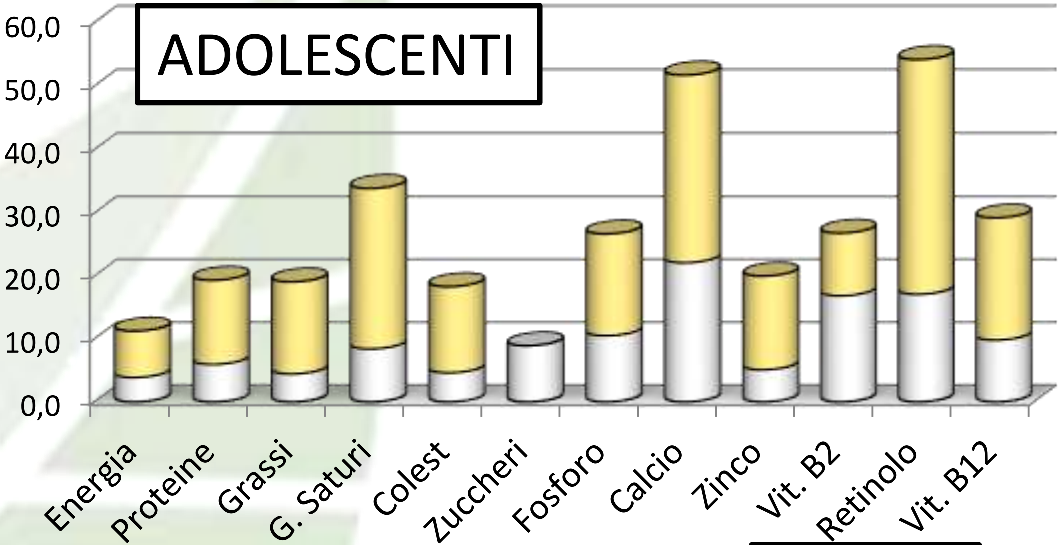
Contenuto di lattosio in diversi formaggi

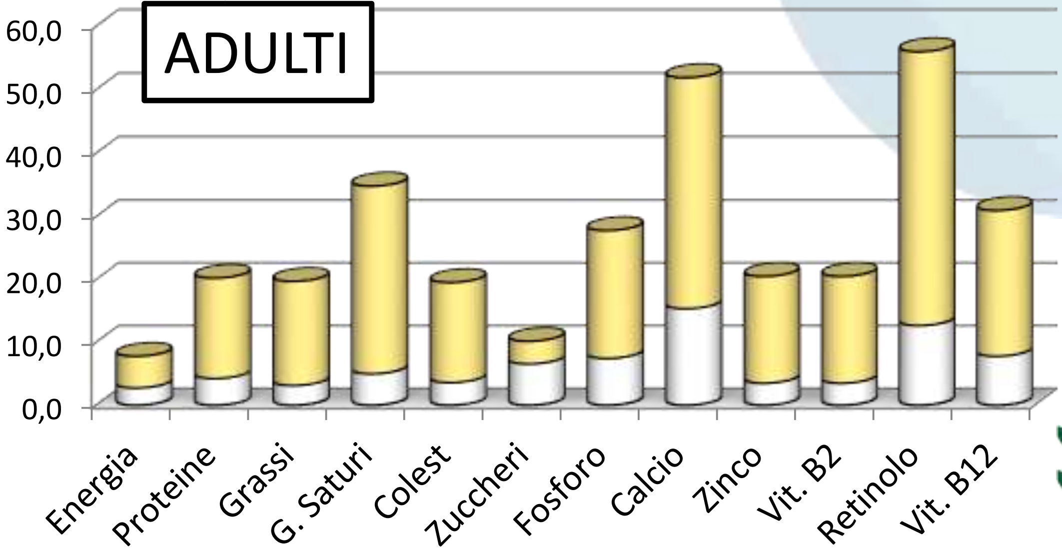
(fonte: tabelle di composizione INRAN)

Prodotto	Lattosio (g/100g)	Prodotto	Lattosio (g/100g)
1) Formaggino	6	23) Italico	1.2
2) Ricotta di pecora	4.2	24) Gorgonzola	1
3) Burrini	4.1	25) Scamorza	1
4) Ricotta di bufala	3.7	26) Formaggio molle da tavola	1
5) Emmenthal	3.6	27) Taleggio	0.9
6) Ricotta di vacca	3.5	28) Fontina	0.8
7) Fiocchi di formaggio magro	3.2	29) Caciotta toscana	0.8
8) Formaggio cremoso spalmabile, light	3.1	30) Mozzarella di vacca	0.7
9) Caciottina vaccina	3	31) Fior di latte	0.7
10) Dolce verde	2.5	32) Cacioricotta di capra	0.5
11) Pecorino siciliano	2.4	33) Caciottina fresca	0.5
12) Caciocavallo	2.3	34) Cheddar	0.5
13) Robiola	2.3	35) Mozzarella di bufala	0.4
14) Caciotta romana di pecora	2.1	36) Butirro calabro	0.3
15) Provolone	2	37) Mascarpone	0.3
16) Crescenza	1.9	38) Pecorino	0.2
17) Caciotta mista	1.8	39) Formaggio cremoso spalmabile	tr
18) Pecorino romano	1.8	40) Grana	tr
19) Groviera	1.5	41) Stracchino	tr
20) Caciottina mista	1.5	42) Camembert	tr
21) Feta	1.5	43) Parmigiano	tr
22) Latteria [formaggio tipico del Veneto]	1.4	44) Brie	tr

Contributo dei prodotti lattiero caseari all'apporto complessivo di energia e nutrienti in Italia

(dati: INRAN-SCAI, Sette S. et al 2013)





Fonti di calcio nella dieta degli italiani

A

British Journal of Nutrition (2016), **115**, 709–717
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An overview of the contribution of dairy
in the Irish diet: results from the Nation

Emma L. Feeney[1,2], Anne P. Nugent[1,2], Breige Mc Nu
Eileen R. Gibney[1,2]*

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(Submitted 21 August 2015 – Final revision received 18 October 2015 – Accepte

Abstract

Dairy products are important contributors to nutrient intakes. Howeve
potentially due to concerns regarding Na and SFA in dairy foods, partic
study used data from the National Adult Nutrition Survey (NANS) to (1
examine the contribution of cheese to population nutrient intakes. T
representative sample (*n* 1500) between 2008 and 2010 using 4-d semi-
Mean daily population dairy intake was 290·0 (SD 202·1) g. Dairy products provided 8·7 % of the population intake of reported dietary Na, 19·8 % SFA, 39 % Ca, 34·5 % vitamin B_{12} and 10·5 % Mg. Cheese alone provided 3·9 % Na intake, 9·1 % Ca, 12·6 % retinol, 8·3 % SFA, 3·7 % protein, 3·4 % vitamin B_{12} and 3·2 % riboflavin. High dairy consumers had greater Ca and Mg intakes per 10 MJ, greater total energy intake, greater percentage of energy from carbohydrate and SFA and lower Na intakes compared with low dairy consumers. Similar trends were observed for high consumers of cheese for most nutrients except Na. These results demonstrate that dairy and cheese are important contributors to nutrient intakes of public health interest, such as Ca and B_{12}. Our analysis also demonstrated that food-based dietary guidelines recommending lower-fat versions of dairy products are warranted.

ournal of Nutrition

Table 4. Mean percentage contribution of dairy foods and cheese to nutrients in the Irish population

	Contribution of dairy foods and cheese to nutrients	
	Dairy (%)	Cheese (%)
Energy	9·4	2·3
Protein	13·3	3·7
Carbohydrate	10	0
Fat	12·8	5
SFA	19·8	8·3
MUFA	10·1	4
PUFA	2·7	1·5
Na	8·7	3·9
Ca	38·8	9·1
Mg	10·5	1·2
Retinol	37·4	12·6
Folate	11·4	1·1
Riboflavin	28·9	3·2
Vitamin D	10·9	1·7
Vitamin E	6·4	0·8
Vitamin B_{12}	34·5	3·4
Pantothenic acid	20·7	0·9
Fe	1·3	0·5
I	44	2·3
Thiamine	5·8	0·3
Cu	0·8	0·6
Carotene	4·6	2·1
Zn	13·4	3·1

Apporti di nutrienti nella dieta italiana
Ragazzi e ragazze

(dati INRAN SCAI Sette S. et al 2010)

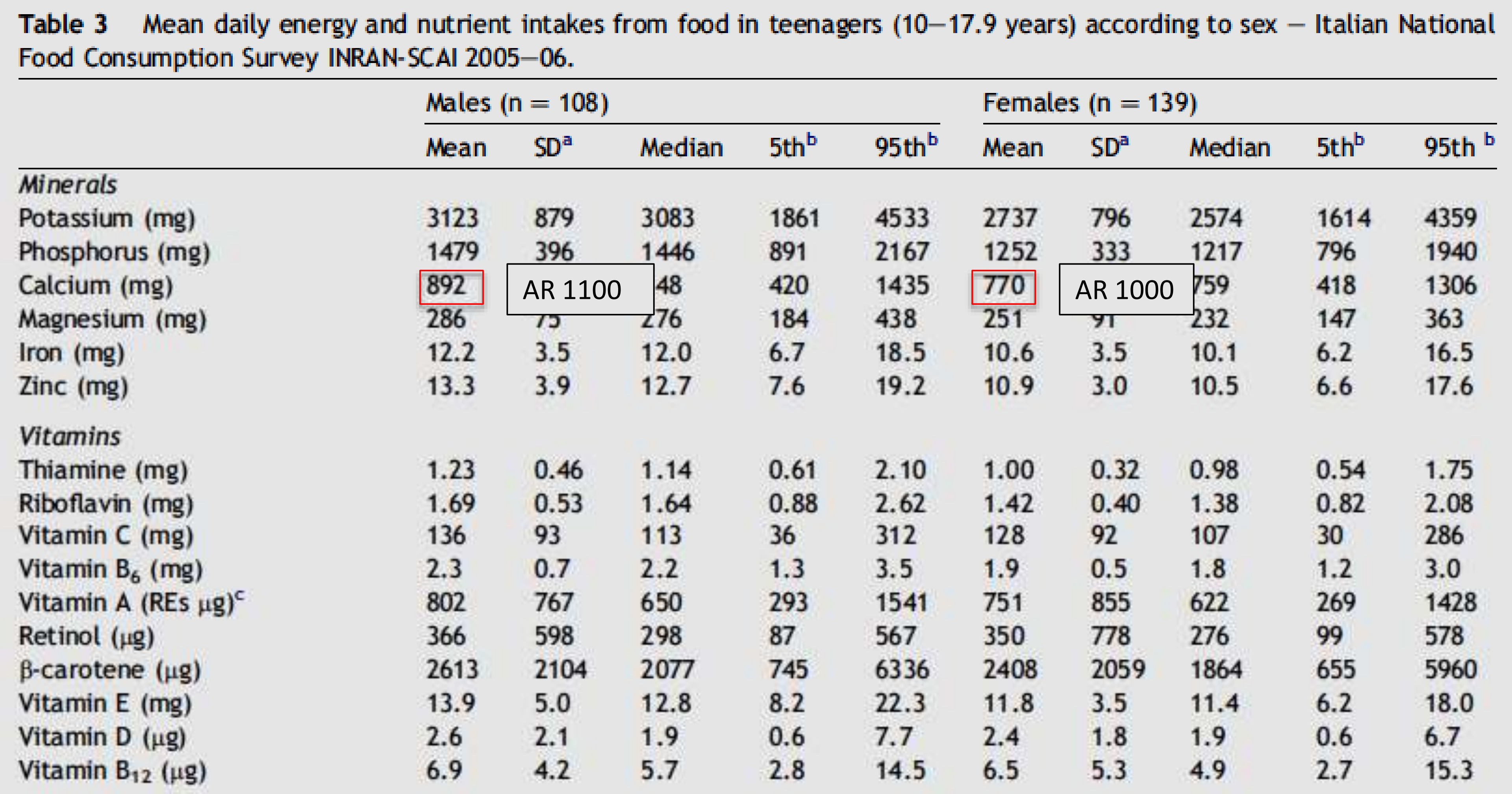

Table 3 Mean daily energy and nutrient intakes from food in teenagers (10–17.9 years) according to sex – Italian National Food Consumption Survey INRAN-SCAI 2005–06.

	Males (n = 108)					Females (n = 139)				
	Mean	SD^a	Median	5th^b	95th^b	Mean	SD^a	Median	5th^b	95th^b
Minerals										
Potassium (mg)	3123	879	3083	1861	4533	2737	796	2574	1614	4359
Phosphorus (mg)	1479	396	1446	891	2167	1252	333	1217	796	1940
Calcium (mg)	892	[illegible]	[illegible]	420	1435	770	[illegible]	759	418	1306
Magnesium (mg)	286	75	276	184	438	251	91	232	147	363
Iron (mg)	12.2	3.5	12.0	6.7	18.5	10.6	3.5	10.1	6.2	16.5
Zinc (mg)	13.3	3.9	12.7	7.6	19.2	10.9	3.0	10.5	6.6	17.6
Vitamins										
Thiamine (mg)	1.23	0.46	1.14	0.61	2.10	1.00	0.32	0.98	0.54	1.75
Riboflavin (mg)	1.69	0.53	1.64	0.88	2.62	1.42	0.40	1.38	0.82	2.08
Vitamin C (mg)	136	93	113	36	312	128	92	107	30	286
Vitamin B_6 (mg)	2.3	0.7	2.2	1.3	3.5	1.9	0.5	1.8	1.2	3.0
Vitamin A (REs μg)^c	802	767	650	293	1541	751	855	622	269	1428
Retinol (μg)	366	598	298	87	567	350	778	276	99	578
β-carotene (μg)	2613	2104	2077	745	6336	2408	2059	1864	655	5960
Vitamin E (mg)	13.9	5.0	12.8	8.2	22.3	11.8	3.5	11.4	6.2	18.0
Vitamin D (μg)	2.6	2.1	1.9	0.6	7.7	2.4	1.8	1.9	0.6	6.7
Vitamin B_{12} (μg)	6.9	4.2	5.7	2.8	14.5	6.5	5.3	4.9	2.7	15.3

AR 1100

AR 1000

Apporti di nutrienti nella dieta italiana
Adulti uomini e donne

(dati INRAN SCAI Sette S. et al 2010)

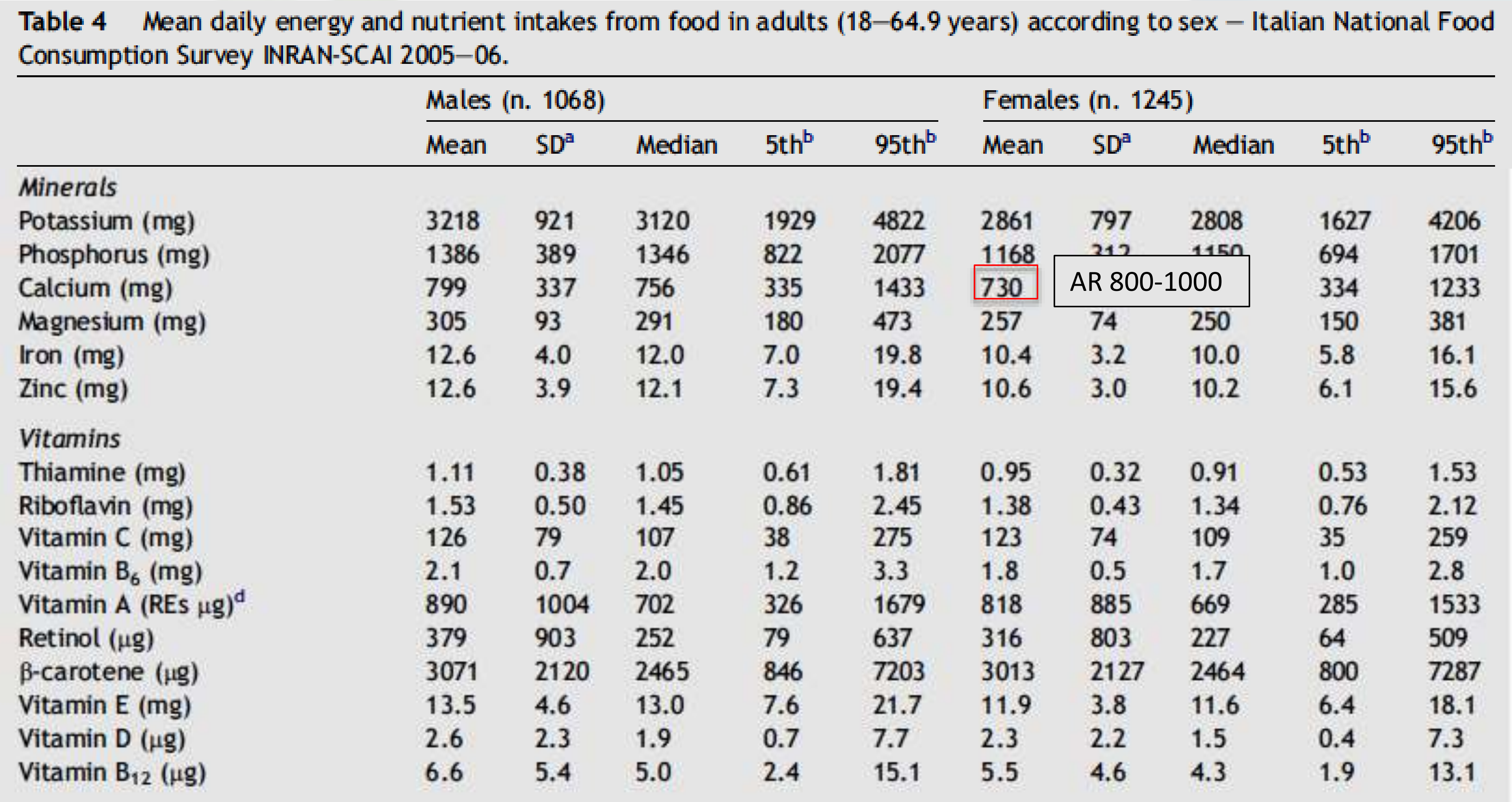

Table 4 Mean daily energy and nutrient intakes from food in adults (18—64.9 years) according to sex — Italian National Food Consumption Survey INRAN-SCAI 2005—06.

	Males (n. 1068)					Females (n. 1245)				
	Mean	SD[a]	Median	5th[b]	95th[b]	Mean	SD[a]	Median	5th[b]	95th[b]
Minerals										
Potassium (mg)	3218	921	3120	1929	4822	2861	797	2808	1627	4206
Phosphorus (mg)	1386	389	1346	822	2077	1168	312	1150	694	1701
Calcium (mg)	799	337	756	335	1433	730	[illegible]	[illegible]	334	1233
Magnesium (mg)	305	93	291	180	473	257	74	250	150	381
Iron (mg)	12.6	4.0	12.0	7.0	19.8	10.4	3.2	10.0	5.8	16.1
Zinc (mg)	12.6	3.9	12.1	7.3	19.4	10.6	3.0	10.2	6.1	15.6
Vitamins										
Thiamine (mg)	1.11	0.38	1.05	0.61	1.81	0.95	0.32	0.91	0.53	1.53
Riboflavin (mg)	1.53	0.50	1.45	0.86	2.45	1.38	0.43	1.34	0.76	2.12
Vitamin C (mg)	126	79	107	38	275	123	74	109	35	259
Vitamin B_6 (mg)	2.1	0.7	2.0	1.2	3.3	1.8	0.5	1.7	1.0	2.8
Vitamin A (REs μg)[d]	890	1004	702	326	1679	818	885	669	285	1533
Retinol (μg)	379	903	252	79	637	316	803	227	64	509
β-carotene (μg)	3071	2120	2465	846	7203	3013	2127	2464	800	7287
Vitamin E (mg)	13.5	4.6	13.0	7.6	21.7	11.9	3.8	11.6	6.4	18.1
Vitamin D (μg)	2.6	2.3	1.9	0.7	7.7	2.3	2.2	1.5	0.4	7.3
Vitamin B_{12} (μg)	6.6	5.4	5.0	2.4	15.1	5.5	4.6	4.3	1.9	13.1

AR 800-1000

Nutrienti nel formaggio

GRANA (Fonte: tabelle di composizione INRAN)

Nutriente	Quantità in una porzione	RIFERIMENTO	Nutriente	Quantità in una porzione	RIFERIMENTO
Energia (kcal)	196	2000	Rame (mg)	0,12	0,9
Proteine (g)	16.5	75	Selenio (µg)	6	55
Grassi (g) Di cui saturi (g)	14 8,8	67 22	Iodio (µg)	18	150
Colesterolo (mg)	54	300	Vitamina A (µg)	112	600-700
Calcio (mg)	582	1000-1200	Tiamina (mg)	0,01	1,1-1,2
Fosforo (mg)	346	700	Riboflavina (mg)	0,18	1,3-1,6
Magnesio (mg)	32	240	Niacina (mg)	0,05	18
Sodio (mg)	350	2000	Vitamina B_6 (mg)	0.06	1,5-1,7
Potassio (mg)	60	3900	Vitamina B_{12} (µg)	1.5	2,4
Cloro (mg)	480	1900-2300	Folati (µg)	2.5	400
Ferro (mg)	0,1	10-18	Vitamina C (mg)	0	85-105
Zinco (mg)	5.5	9-12	Vitamina D (µg)	0,25	15

Prodotti lattiero caseari e salute dell’osso

Osteoporos Int (2018) 29:385–396
https://doi.org/10.1007/s00198-017-4285-8

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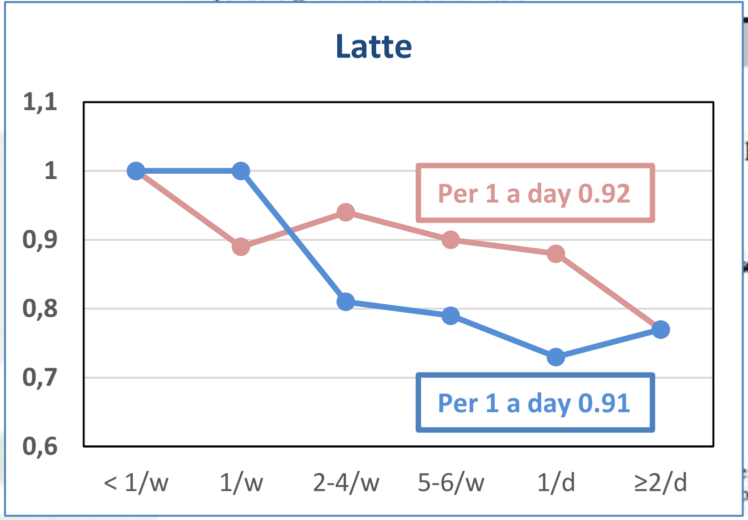
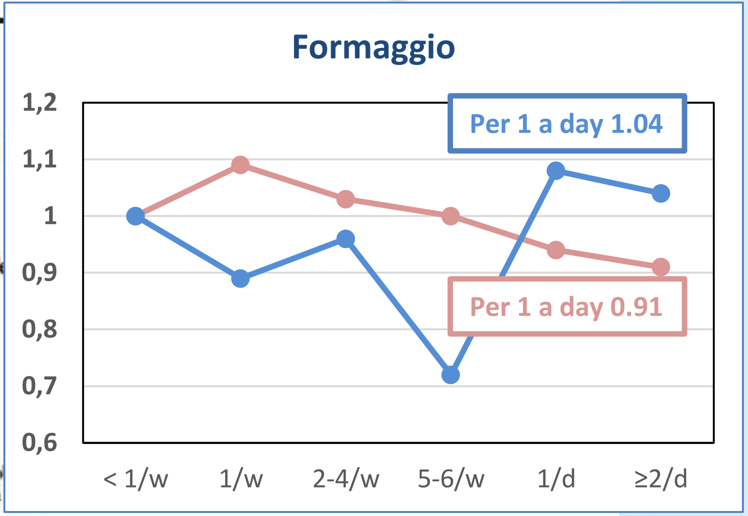
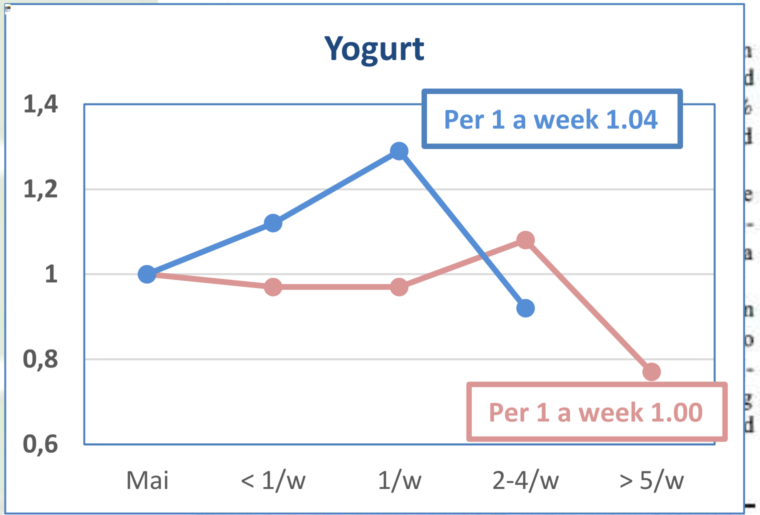
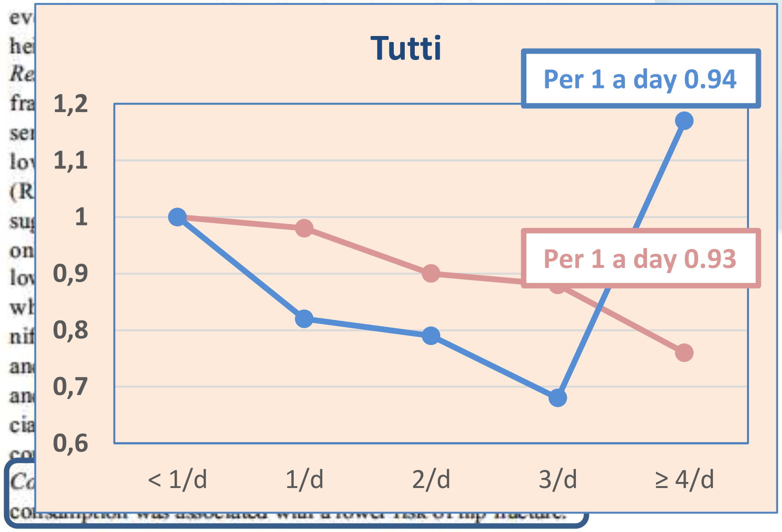








Electronic supplementary material The online version of this article (https://doi.org/10.1007/s00198-017-4285-8) contains supplementary material, which is available to authorized users.

I pregiudizi sul formaggio

- Troppe calorie
- Troppo sale
- Troppi grassi
- Troppi saturi
- Troppo colesterolo

Quali le evidenze sull’impatto dei prodotti lattiero caseari sui fattori di rischio cardiometabolico?

Comprehensive Review of the Impact of Dairy Foods and Dairy Fat on Cardiometabolic Risk[1–3]

Jean-Philippe Drouin-Chartier,[4] Julie Anne Côté,[6] Marie-Ève Labonté,[7] Didier Brassard,[4] Maude Tessier-Grenier,[4] Sophie Desroches,[4] Patrick Couture,[4,5] and Benoît Lamarche[4]*

[4]Institute of Nutrition and Functional Foods and [5]Centre Hospitalier Universitaire de Québec, Laval University, Quebec City, Canada; [6]Institut Universitaire de Cardiologie et de Pneumologie de Québec, Quebec City, Canada; and [7]Department of Nutritional Science, Faculty of Medicine, University of Toronto, Toronto, Canada

©2016 American Society for Nutrition. *Adv Nutr* 2016;7:1041–51; doi:10.3945/an.115.011619.

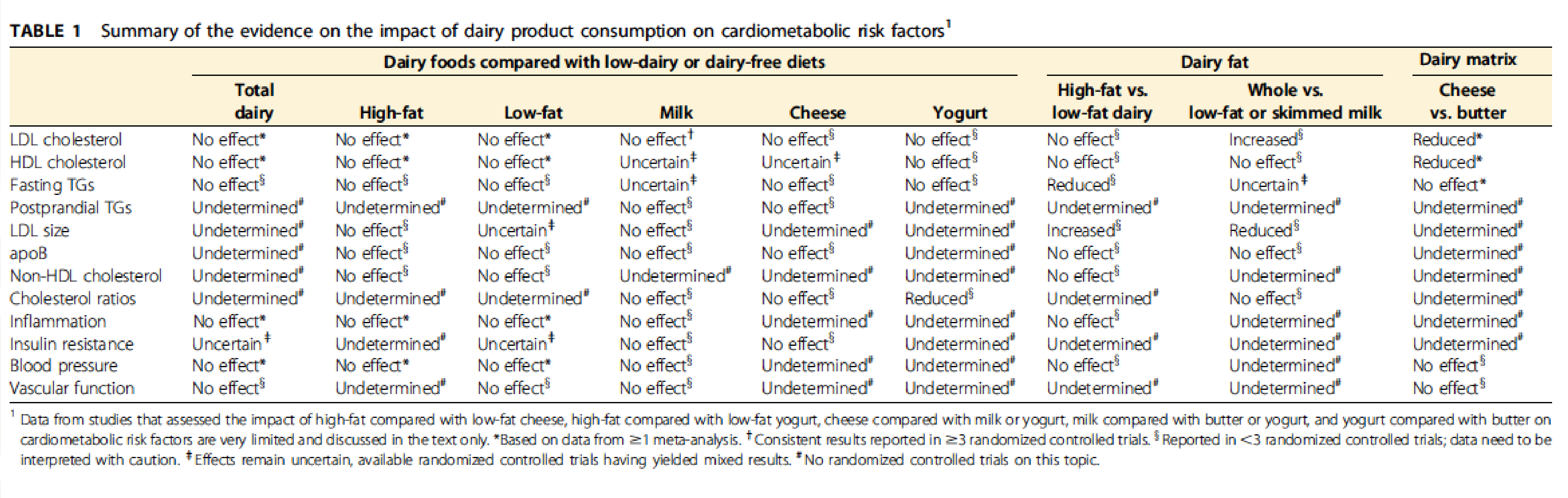
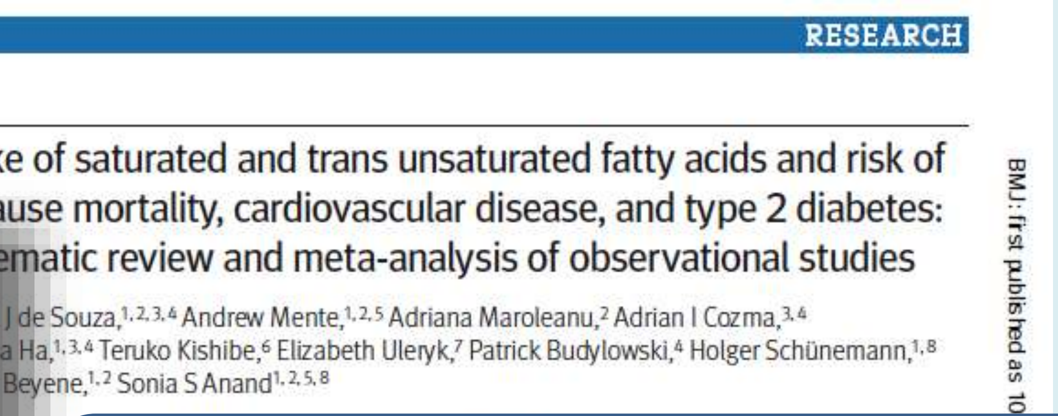


TABLE 1 Summary of the evidence on the impact of dairy product consumption on cardiometabolic risk factors[1]

	Dairy foods compared with low-dairy or dairy-free diets						Dairy fat		Dairy matrix
	Total dairy	High-fat	Low-fat	Milk	Cheese	Yogurt	High-fat vs. low-fat dairy	Whole vs. low-fat or skimmed milk	Cheese vs. butter
LDL cholesterol	No effect[*]	No effect[*]	No effect[*]	No effect[†]	No effect[§]	No effect[§]	No effect[§]	Increased[§]	Reduced[*]
HDL cholesterol	No effect[*]	No effect[*]	No effect[*]	Uncertain[‡]	Uncertain[‡]	No effect[§]	No effect[§]	No effect[§]	Reduced[*]
Fasting TGs	No effect[§]	No effect[§]	No effect[§]	Uncertain[‡]	No effect[§]	No effect[§]	Reduced[§]	Uncertain[‡]	No effect[*]
Postprandial TGs	Undetermined[#]	Undetermined[#]	Undetermined[#]	No effect[§]	No effect[§]	Undetermined[#]	Undetermined[#]	Undetermined[#]	Undetermined[#]
LDL size	Undetermined[#]	No effect[§]	Uncertain[‡]	No effect[§]	Undetermined[#]	Undetermined[#]	Increased[§]	Reduced[§]	Undetermined[#]
apoB	Undetermined[#]	No effect[§]	No effect[§]	No effect[§]	No effect[§]	Undetermined[#]	No effect[§]	No effect[§]	Undetermined[#]
Non-HDL cholesterol	Undetermined[#]	No effect[§]	No effect[§]	Undetermined[#]	Undetermined[#]	Undetermined[#]	No effect[§]	Undetermined[#]	Undetermined[#]
Cholesterol ratios	Undetermined[#]	Undetermined[#]	Undetermined[#]	No effect[§]	No effect[§]	Reduced[§]	Undetermined[#]	No effect[§]	Undetermined[#]
Inflammation	No effect[*]	No effect[*]	No effect[*]	No effect[§]	Undetermined[#]	Undetermined[#]	No effect[§]	Undetermined[#]	Undetermined[#]
Insulin resistance	Uncertain[‡]	Undetermined[#]	Uncertain[‡]	No effect[§]	No effect[§]	Undetermined[#]	Undetermined[#]	Undetermined[#]	Undetermined[#]
Blood pressure	No effect[*]	No effect[*]	No effect[*]	No effect[§]	Undetermined[#]	Undetermined[#]	No effect[§]	Undetermined[#]	No effect[§]
Vascular function	No effect[§]	Undetermined[#]	No effect[§]	No effect[§]	Undetermined[#]	Undetermined[#]	Undetermined[#]	Undetermined[#]	No effect[§]

[1] Data from studies that assessed the impact of high-fat compared with low-fat cheese, high-fat compared with low-fat yogurt, cheese compared with milk or yogurt, milk compared with butter or yogurt, and yogurt compared with butter on cardiometabolic risk factors are very limited and discussed in the text only. *Based on data from ≥1 meta-analysis. [†]Consistent results reported in ≥3 randomized controlled trials. [§]Reported in <3 randomized controlled trials; data need to be interpreted with caution. [‡]Effects remain uncertain, available randomized controlled trials having yielded mixed results. [#]No randomized controlled trials on this topic.

Le nuove evidenze sui grassi saturi



RESEARCH

OPEN ACCESS

Intake of saturated and trans unsaturated fatty acids and risk of all cause mortality, cardiovascular disease, and type 2 diabetes: ematic review and meta-analysis of observational studies

J de Souza,[1,2,3,4] Andrew Mente,[1,2,5] Adriana Maroleanu,[2] Adrian I Cozma,[3,4]
a Ha,[1,3,4] Teruko Kishibe,[6] Elizabeth Uleryk,[7] Patrick Budylowski,[4] Holger Schünemann,[1,8]
Beyene,[1,2] Sonia S Anand[1,2,5,8]

BMJ: first published as 10

CONCLUSIONS

Saturated fats are not associated with all cause mortality, CVD, CHD, ischemic stroke, or type 2 diabetes, but the evidence is heterogeneous with methodological limitations. Trans fats are associated with all cause mortality, total CHD, and CHD mortality, probably because of higher levels of intake of industrial trans fats than ruminant trans fats. Dietary guidelines must carefully consider the health effects of recommendations for alternative macronutrients to replace trans fats and saturated fats.

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Additional material is published online only. To view please visit the journal online (http://dx.doi.

DATA EXTRAC

Two reviewer assessed stu risks were poole quantified. Potential publication bias was assessed and subgroup analyses were undertaken. The GRADE

“moderate” and “very low” to “low” for other associations.

crea
Consiglio per la ricerca in agricoltura
e l'analisi dell'econ

E non tutti i saturi sono uguali

Differences in the prospe individual plasma phosp incident type 2 diabetes:

Nita G Forouhi, Albert Koulman, Stephen J Sharp, Fumiaki I
Marcela Guevara, Joline WJ Beulens, Geertruida J van Woud
Pilar Amiano, Heiner Boeing, Françoise Clavel-Chapelon, Lo
Marianne Uhre Jakobsen, Rudolf Kaaks, Timothy J Key, Kay
Domenico Palli, J Ramón Quirós, Olov Rolandsson, Nina Ro
Annemieke MW Spijkerman, Anne Tjonneland, Maria-José
Claudia Langenberg, Elio Riboli, Nicholas J Wareham

Lancet Diabetes Endocrinol 2014; 2: 810–18

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August 6, 2014
http://dx.doi.org/10.1016/S2213-8587(14)70146-9

See Comment page 770

MRC Epidemiology Unit, University of Cambridge, Cambridge, UK (N G Forouhi FFPHM, S J Sharp MSc, F Imamura PhD, C Langenberg PhD, Prof N J Wareham FRCP); **MRC Human Nutrition Research, Cambridge, UK** (A Koulman PhD, L Wang PhD, K Summerhill BSc, J L Griffin DPhil); **German Institute of Human Nutrition Potsdam-Rehbruecke, Potsdam, Germany** (J Kröger DrPH, Prof M B Schulze DrPH, Prof H Boeing PhD); **Nuffield Department of Medicine, University of Oxford, Oxford, UK** (F L Crowe PhD, Prof T J Key DPhil); **Department of Epidemiology, Murcia Regional Health Council, Murcia, Spain** (J M Huerta PhD, M-J Tormo PhD); **CIBER**

Summary

Background Conflicting evidence exists regardin
In this longitudinal case-cohort study, we aimed
individual plasma phospholipid SFAs and incid

Methods The EPIC-InterAct case-cohort study i
subcohort of 16 154 individuals who were selec
person-years of follow-up (the EPIC study). Inc
several sources of evidence. Gas chromatogra
phospholipids (mol%); samples from people
random order by centre, and laboratory staff we
hazard ratios (HRs) for associations per SD of
regression, which is weighted for case-cohort s

Findings SFAs accounted for 46% of total plas
SFAs were associated with incident type 2 di
(14:0 [myristic acid], 16:0 [palmitic acid], and 18
(HR [95% CI] per SD difference: myristic acid 1
1·06 [1·00–1·13]). By contrast, measured odd-ch
inversely associated with incident type 2 diabete
acid and 0·67 [0·63–0·71] for heptadecanoic
22:0 [behenic acid], 23:0 [tricosanoic acid], and
ranging between 0·61 and 0·92). Our findings

Interpretation Different individual plasma pl
opposite directions, which suggests that SFAs
importance of the recognition of subtypes of t

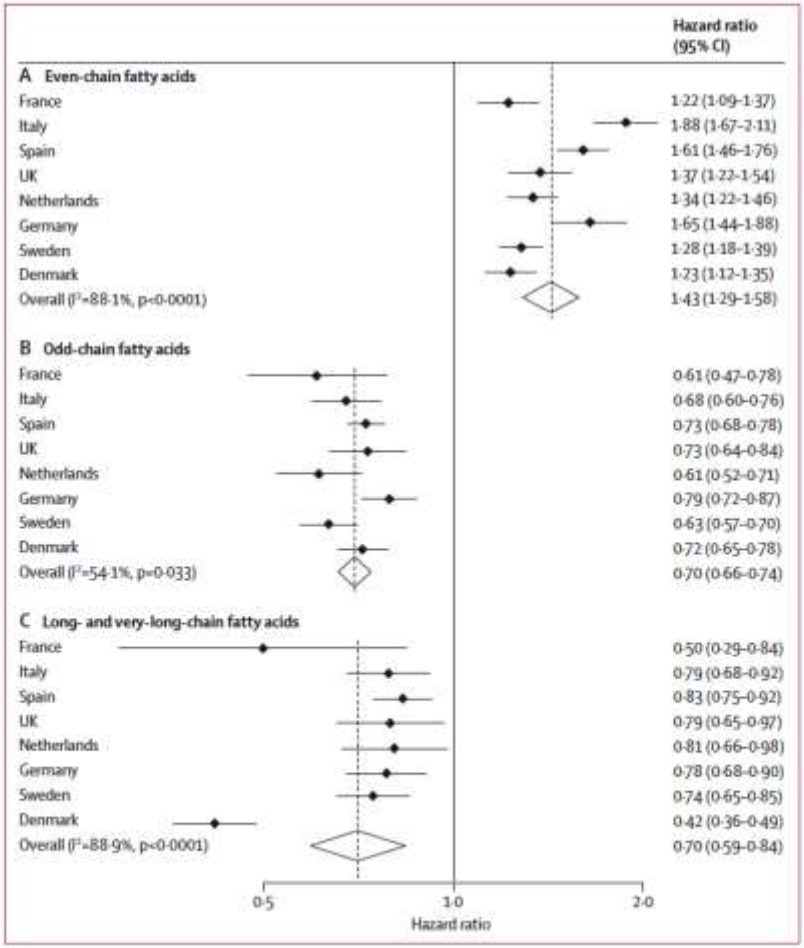
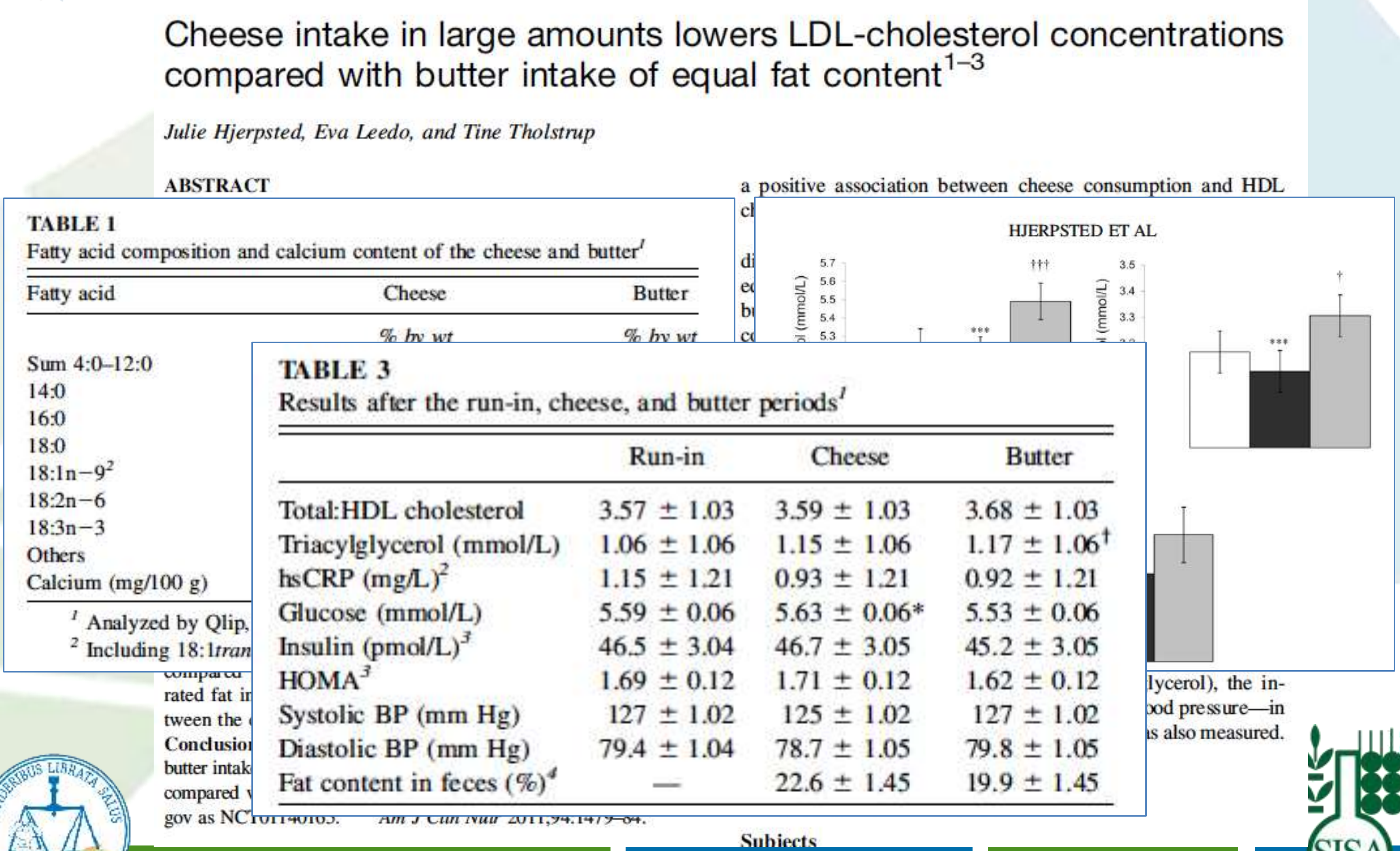


Figure 2: Hazard ratios and 95% CIs for associations between plasma phospholipid saturated fatty acids and incident type 2 diabetes
Associations per 1 SD difference in (A) even-chain fatty acids (saturated fatty acid [SFA] group 1: the sum of 14:0, 16:0, and 18:0), (B) odd-chain fatty acids (SFA group 2: the sum of 15:0 and 17:0), and (C) long- and very-long-chain fatty acids (SFA group 3: the sum of 20:0, 22:0, 23:0, and 24:0) and type 2 diabetes. Estimates are per country and the pooled estimate is based on random-effects meta-analysis. The analyses included 12 132 cases of type 2 diabetes and 15 919 people in the subcohort (including 755 individuals with type 2 diabetes in the subcohort); used age as the underlying time variable; and were adjusted for centre, sex, smoking status, alcohol intake, physical activity, education level, total energy intake, and BMI.

Centro

L’alimento conta più del nutriente



Cheese intake in large amounts lowers LDL-cholesterol concentrations compared with butter intake of equal fat content[1–3]

Julie Hjerpsted, Eva Leedo, and Tine Tholstrup

ABSTRACT

a positive association between cheese consumption and HDL

TABLE 1
Fatty acid composition and calcium content of the cheese and butter[1]

Fatty acid	Cheese	Butter
	% by wt	% by wt
Sum 4:0–12:0		
14:0		
16:0		
18:0		
18:1n−9[2]		
18:2n−6		
18:3n−3		
Others		
Calcium (mg/100 g)		

[1] Analyzed by Qlip,

[2] Including 18:1tran

HJERPSTED ET AL

TABLE 3
Results after the run-in, cheese, and butter periods[1]

	Run-in	Cheese	Butter
Total:HDL cholesterol	3.57 ± 1.03	3.59 ± 1.03	3.68 ± 1.03
Triacylglycerol (mmol/L)	1.06 ± 1.06	1.15 ± 1.06	1.17 ± 1.06†
hsCRP (mg/L)[2]	1.15 ± 1.21	0.93 ± 1.21	0.92 ± 1.21
Glucose (mmol/L)	5.59 ± 0.06	5.63 ± 0.06*	5.53 ± 0.06
Insulin (pmol/L)[3]	46.5 ± 3.04	46.7 ± 3.05	45.2 ± 3.05
HOMA[3]	1.69 ± 0.12	1.71 ± 0.12	1.62 ± 0.12
Systolic BP (mm Hg)	127 ± 1.02	125 ± 1.02	127 ± 1.02
Diastolic BP (mm Hg)	79.4 ± 1.04	78.7 ± 1.05	79.8 ± 1.05
Fat content in feces (%)[4]	—	22.6 ± 1.45	19.9 ± 1.45

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Conclusion

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compared v

gov as NCT01140165. Am J Clin Nutr 2011;94:1479–84.

lycerol), the in-

ood pressure—in

s also measured.

Subjects

Consumo di formaggio e parametri cardiometabolici

Systematic Review of the Association between Dairy Product Consumption and Risk of Cardiovascular-Related Clinical Outcomes[1–3]

Jean-Philippe Drouin-Chartier,[4] Didier Brassard,[4] Maude Tessier-Grenier,[4] Julie Anne Côté,[5] Marie-Ève Labonté,[6] Sophie Desroches,[4] Patrick Couture,[4,7] and Benoît Lamarche[4]*

[4]Institute of Nutrition and Functional Foods, Laval University, Quebec City, Quebec, Canada; [5]Institut Universitaire de Cardiologie et de Pneumologie de Québec, Quebec City, Quebec, Canada; [6]Department of Nutritional Science, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada; and [7]CHU de Québec-Université Laval, Quebec City, Quebec, Canada

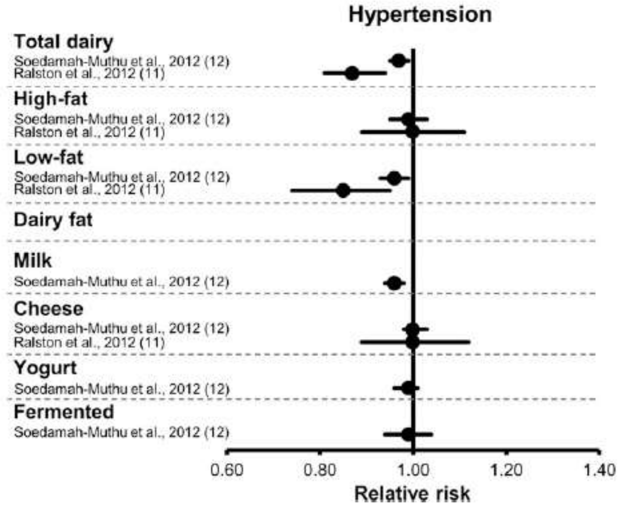

FIGURE 4 Forest plot of RRs from meta-analyses of prospective cohort studies on the association between dairy intake and the risk of hypertension, with their 95% CIs. Each symbol represents data from an individual meta-analysis.

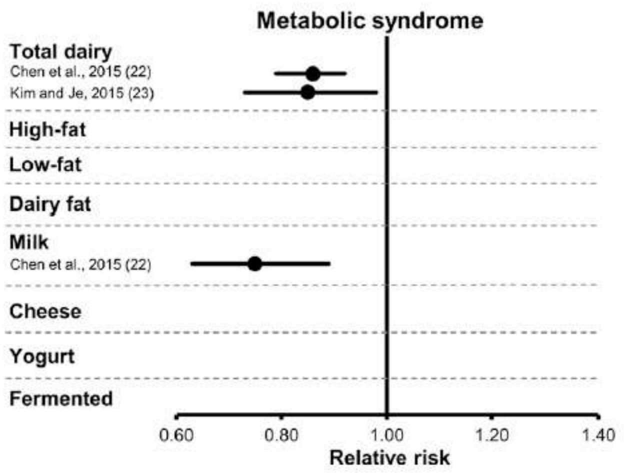

FIGURE 5 Forest plot of RRs from meta-analyses of prospective cohort studies on the association between dairy intake and the risk of metabolic syndrome, with their 95% CIs. Each symbol represents data from an individual meta-analysis.

symbol represents data from an individual meta-analysis. Arrows indicate that the 95% CIs exceed the figure scale. R-TFA, ruminant *trans* fatty acids.

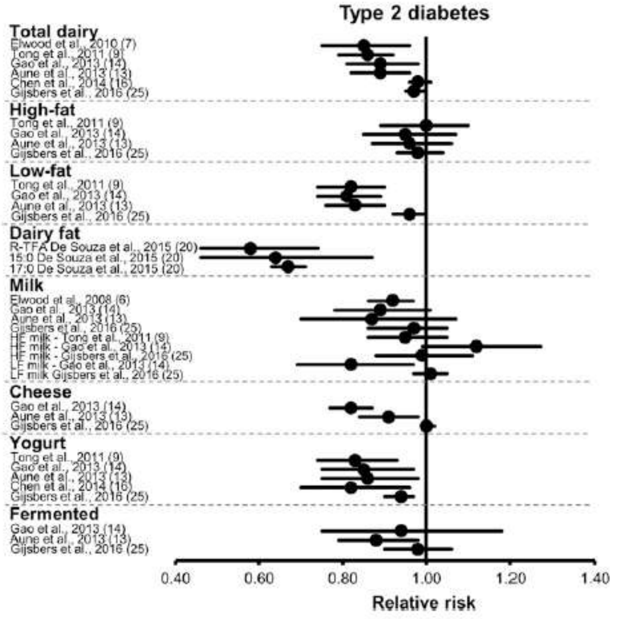

FIGURE 6 Forest plot of RRs from meta-analyses of prospective cohort studies on the association between dairy intake and the risk of type 2 diabetes, with their 95% CIs. Each symbol represents data from an individual meta-analysis. HF, high-fat; LF, low-fat; R-TFA, ruminant *trans* fatty acids.

Con… …hio cardiovascolare

Eur J Nutr (2017) 56:2565–2575
DOI 10.1007/s00394-016-1292-z

ORIGINAL CONTRIBUTION

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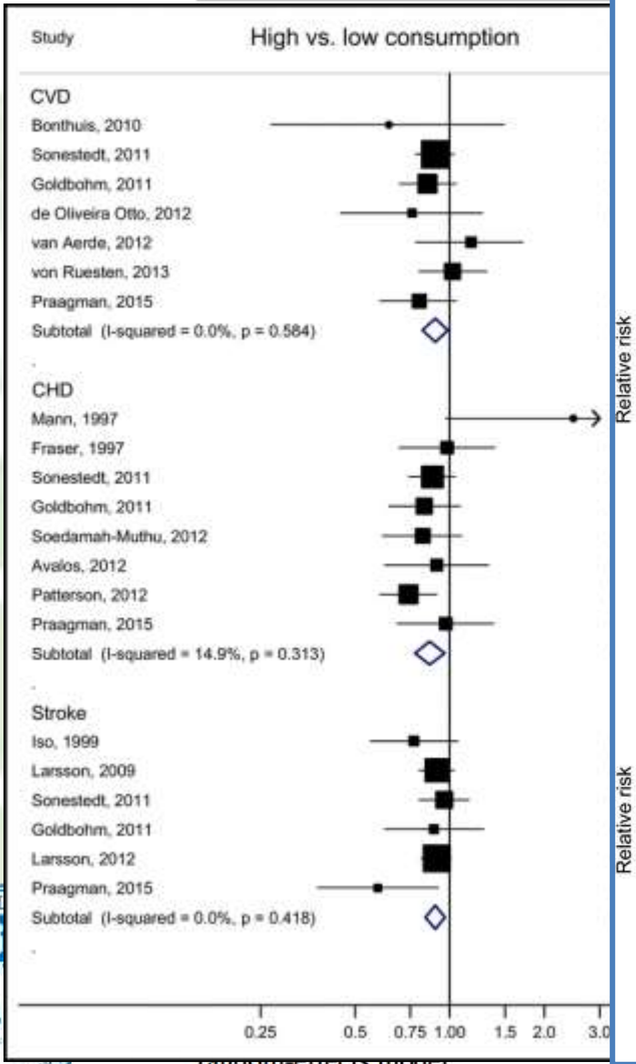
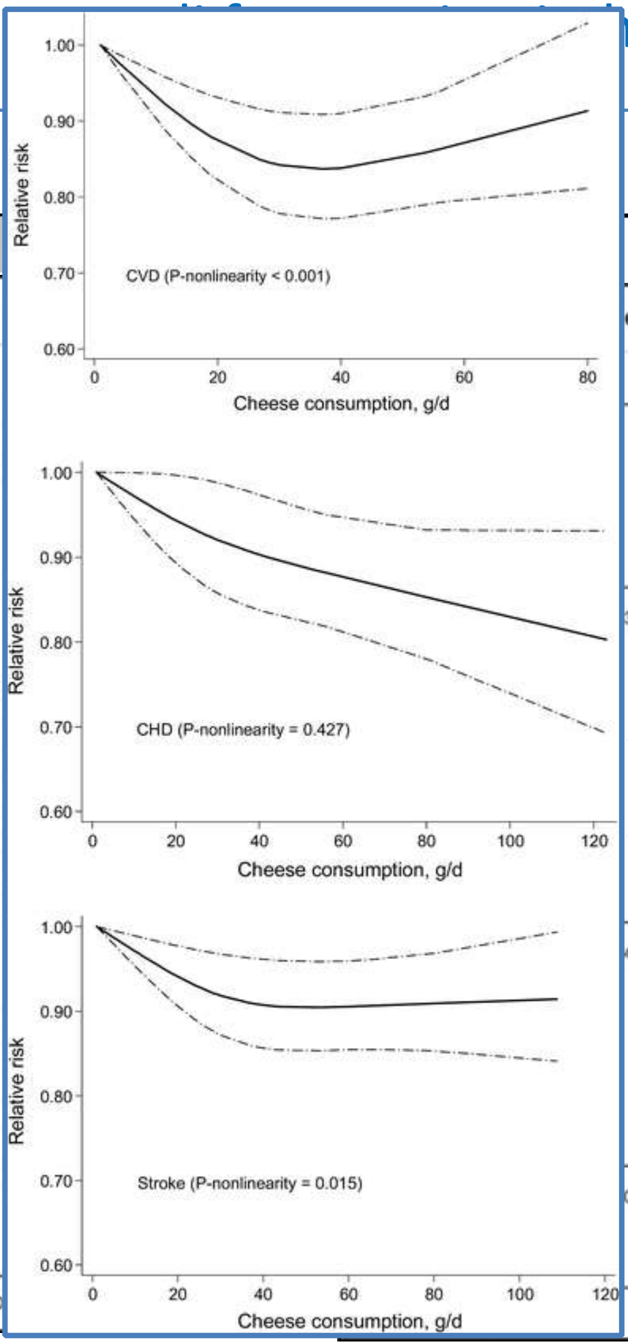
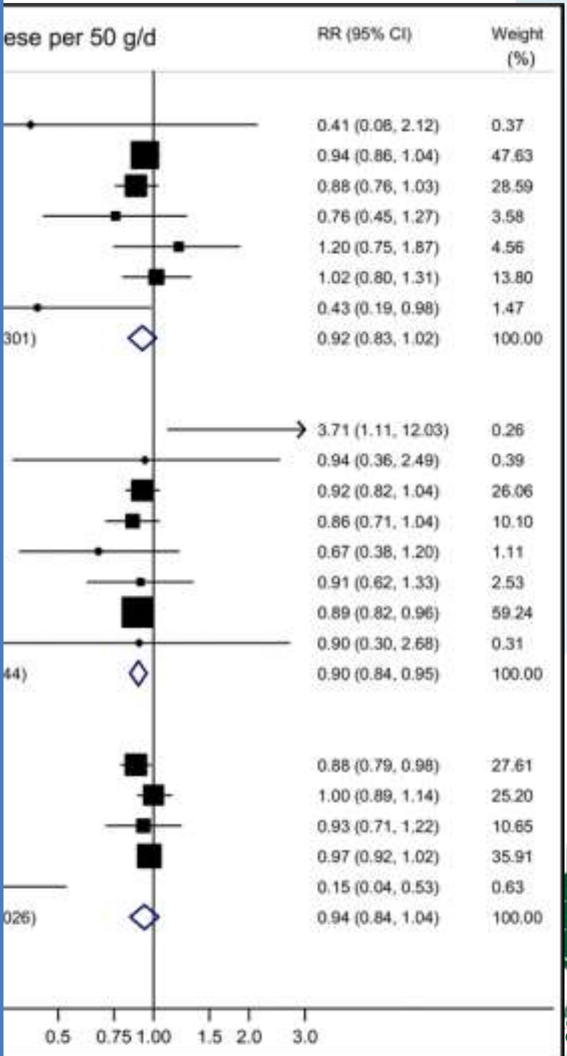
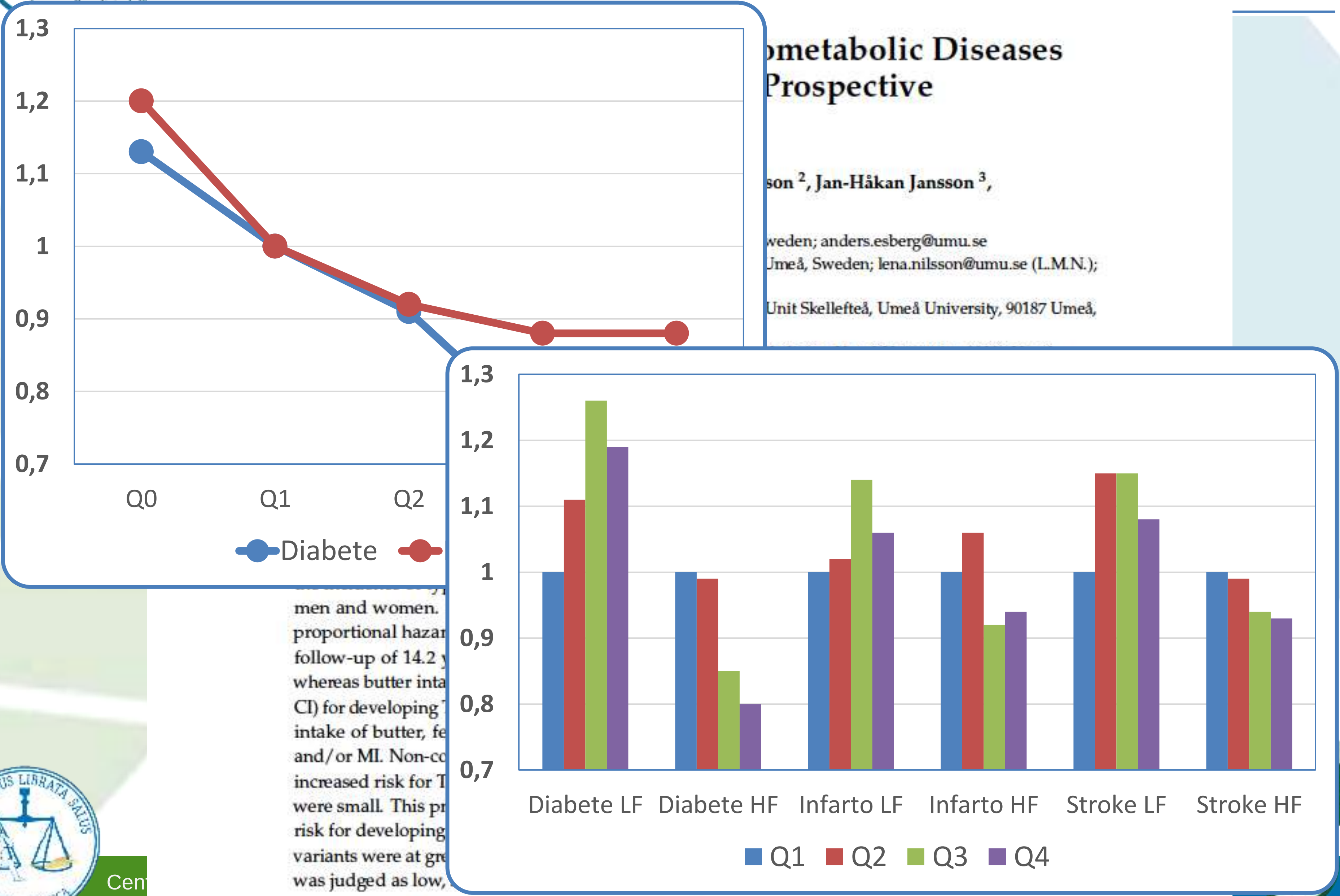






Grassi nel formaggio e rischio di diabete e IM



ometabolic Diseases
Prospective

son ², Jan-Håkan Jansson ³,

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Umeå, Sweden; lena.nilsson@umu.se (L.M.N.);

Unit Skellefteå, Umeå University, 90187 Umeå,

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Consumo di formaggi e mortalità totale e specifica

Original article

Consumption of dairy product and its association with total and cause specific mortality – A population-based cohort study and meta-analysis

Mohsen Mazidi [a, **], Dimitri P. Mikhailidis [b], Naveed Sattar [c], George Howard [d], Ian Graham [e], Maciej Banach [f, g, h, *], on behalf of the Lipid and Blood Pressure Meta-analysis Collaboration (LBPMC) Group

[a] Department of Biology and Biolog
[b] Department of Clinical Biochemis
[c] Institute of Cardiovascular and M
[d] Department of Biostatistics, Unive
[e] Trinity College, Dublin, Ireland
[f] Department of Hypertension, Cha
[g] Polish Mother's Memorial Hospita
[h] Cardiovascular Research Centre,

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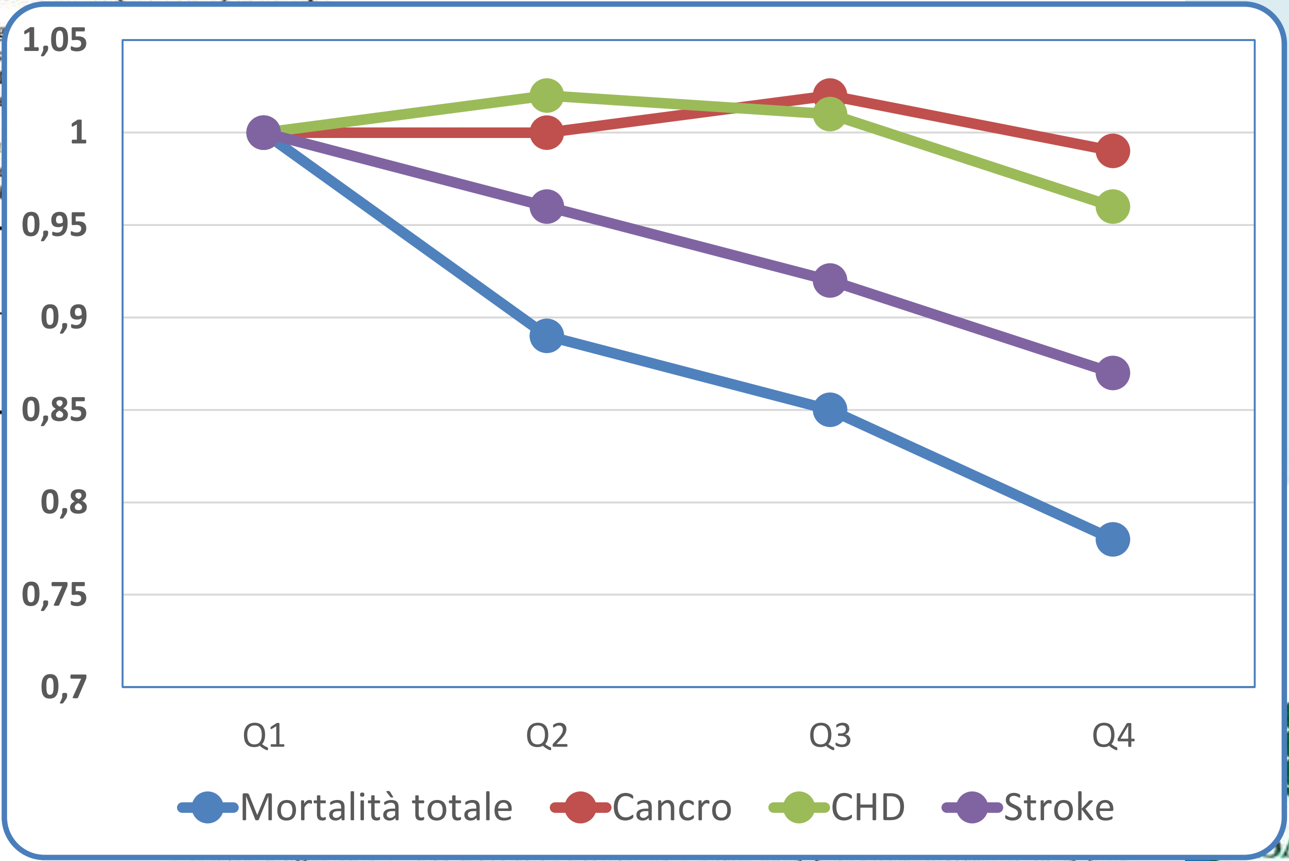

0.97, 95% CI: 0.96–0.99), while milk consumption was associated with higher CHD mortality (RR: 1.04,

Formaggio e peso corporeo

INTERNATIONAL JOURNAL OF FOOD SCIENCES and NUTRITION

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RES

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reside in men. In conclusion, negative associations were found between
of some types of cheese and overweight and obesity in this population.

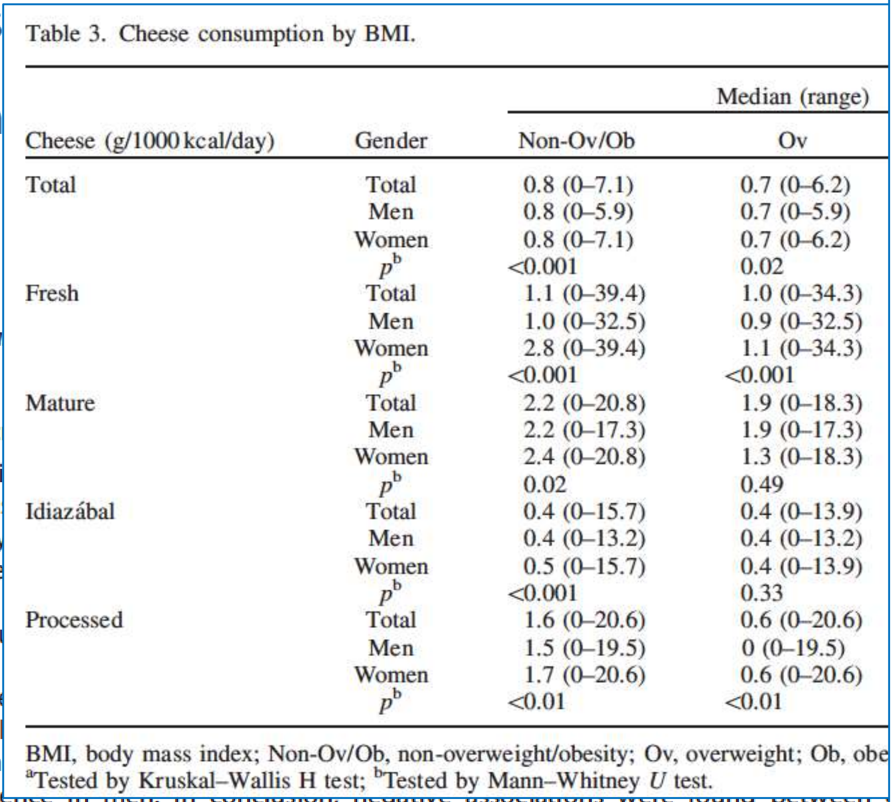


Table 3. Cheese consumption by BMI.

Cheese (g/1000 kcal/day)	Gender	Median (range) Non-Ov/Ob	Median (range) Ov
Total	Total	0.8 (0–7.1)	0.7 (0–6.2)
	Men	0.8 (0–5.9)	0.7 (0–5.9)
	Women	0.8 (0–7.1)	0.7 (0–6.2)
	p^b	<0.001	0.02
Fresh	Total	1.1 (0–39.4)	1.0 (0–34.3)
	Men	1.0 (0–32.5)	0.9 (0–32.5)
	Women	2.8 (0–39.4)	1.1 (0–34.3)
	p^b	<0.001	<0.001
Mature	Total	2.2 (0–20.8)	1.9 (0–18.3)
	Men	2.2 (0–17.3)	1.9 (0–17.3)
	Women	2.4 (0–20.8)	1.3 (0–18.3)
	p^b	0.02	0.49
Idiazábal	Total	0.4 (0–15.7)	0.4 (0–13.9)
	Men	0.4 (0–13.2)	0.4 (0–13.2)
	Women	0.5 (0–15.7)	0.4 (0–13.9)
	p^b	<0.001	0.33
Processed	Total	1.6 (0–20.6)	0.6 (0–20.6)
	Men	1.5 (0–19.5)	0 (0–19.5)
	Women	1.7 (0–20.6)	0.6 (0–20.6)
	p^b	<0.01	<0.01

BMI, body mass index; Non-Ov/Ob, non-overweight/obesity; Ov, overweight; Ob, obe
[a]Tested by Kruskal–Wallis H test; [b]Tested by Mann–Whitney *U* test.

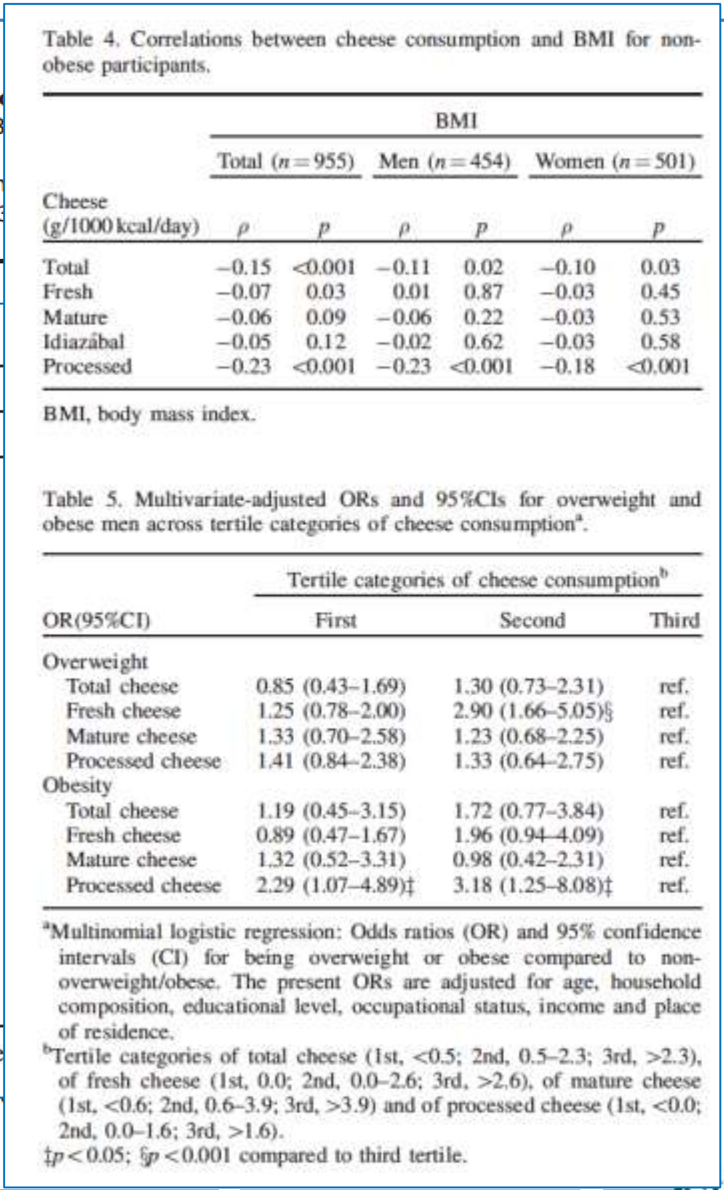


Table 4. Correlations between cheese consumption and BMI for non-obese participants.

Cheese (g/1000 kcal/day)	BMI Total (n = 955) ρ	p	Men (n = 454) ρ	p	Women (n = 501) ρ	p
Total	–0.15	<0.001	–0.11	0.02	–0.10	0.03
Fresh	–0.07	0.03	0.01	0.87	–0.03	0.45
Mature	–0.06	0.09	–0.06	0.22	–0.03	0.53
Idiazábal	–0.05	0.12	–0.02	0.62	–0.03	0.58
Processed	–0.23	<0.001	–0.23	<0.001	–0.18	<0.001

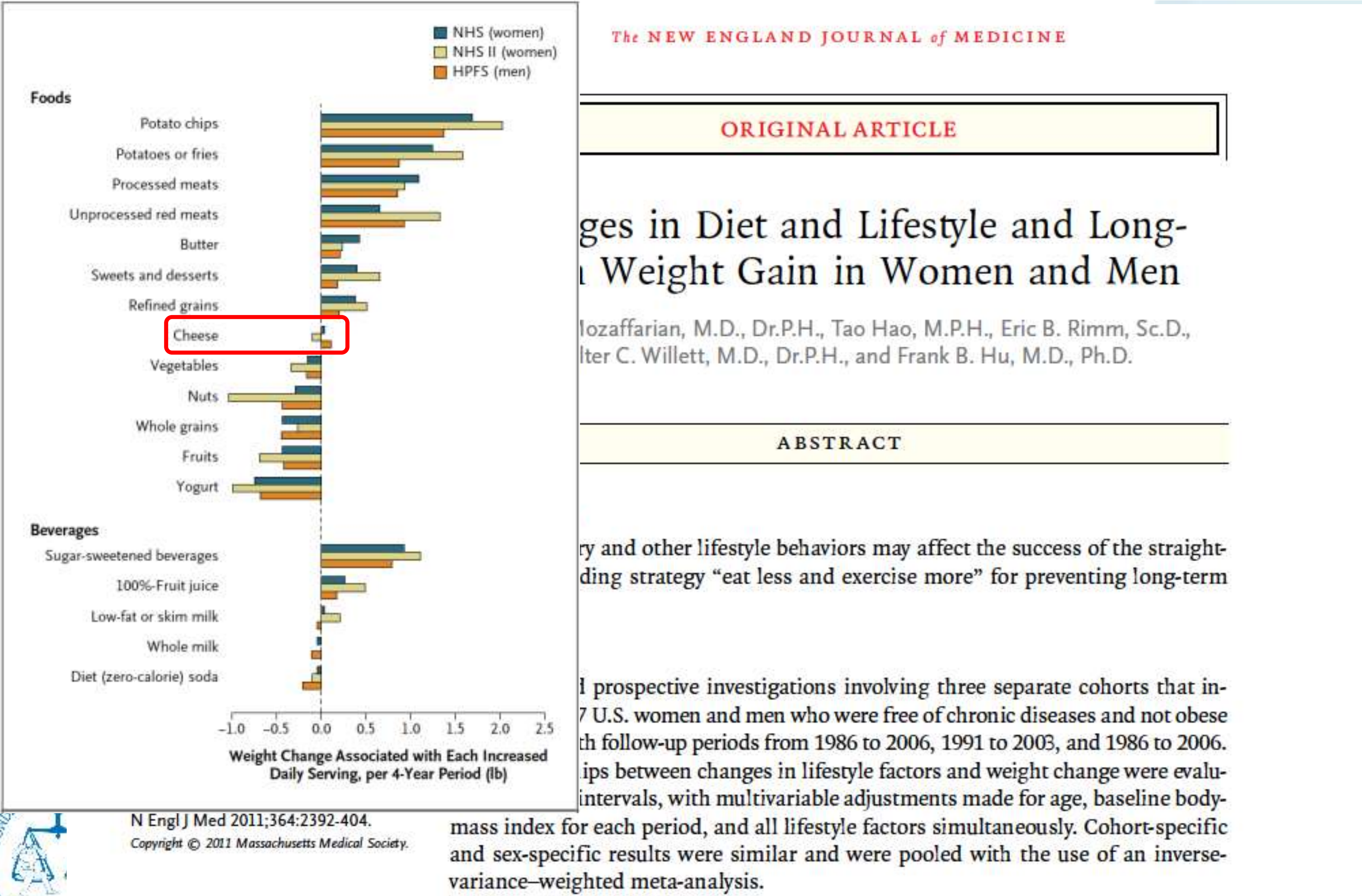
BMI, body mass index.

Table 5. Multivariate-adjusted ORs and 95%CIs for overweight and obese men across tertile categories of cheese consumption[a].

OR(95%CI)	Tertile categories of cheese consumption[b] First	Second	Third
Overweight			
Total cheese	0.85 (0.43–1.69)	1.30 (0.73–2.31)	ref.
Fresh cheese	1.25 (0.78–2.00)	2.90 (1.66–5.05)§	ref.
Mature cheese	1.33 (0.70–2.58)	1.23 (0.68–2.25)	ref.
Processed cheese	1.41 (0.84–2.38)	1.33 (0.64–2.75)	ref.
Obesity			
Total cheese	1.19 (0.45–3.15)	1.72 (0.77–3.84)	ref.
Fresh cheese	0.89 (0.47–1.67)	1.96 (0.94–4.09)	ref.
Mature cheese	1.32 (0.52–3.31)	0.98 (0.42–2.31)	ref.
Processed cheese	2.29 (1.07–4.89)‡	3.18 (1.25–8.08)‡	ref.

[a]Multinomial logistic regression: Odds ratios (OR) and 95% confidence intervals (CI) for being overweight or obese compared to non-overweight/obese. The present ORs are adjusted for age, household composition, educational level, occupational status, income and place of residence.
[b]Tertile categories of total cheese (1st, <0.5; 2nd, 0.5–2.3; 3rd, >2.3), of fresh cheese (1st, 0.0; 2nd, 0.0–2.6; 3rd, >2.6), of mature cheese (1st, <0.6; 2nd, 0.6–3.9; 3rd, >3.9) and of processed cheese (1st, <0.0; 2nd, 0.0–1.6; 3rd, >1.6).
‡$p < 0.05$; §$p < 0.001$ compared to third tertile.

Consumi associati all’aumento di peso nel tempo



N Engl J Med 2011;364:2392-404.

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The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

ges in Diet and Lifestyle and Long-
Weight Gain in Women and Men

lozaffarian, M.D., Dr.P.H., Tao Hao, M.P.H., Eric B. Rimm, Sc.D.,
lter C. Willett, M.D., Dr.P.H., and Frank B. Hu, M.D., Ph.D.

ABSTRACT

ry and other lifestyle behaviors may affect the success of the straight-
ding strategy “eat less and exercise more” for preventing long-term

l prospective investigations involving three separate cohorts that in-
7 U.S. women and men who were free of chronic diseases and not obese
th follow-up periods from 1986 to 2006, 1991 to 2003, and 1986 to 2006.
ips between changes in lifestyle factors and weight change were evalu-
intervals, with multivariable adjustments made for age, baseline body-
mass index for each period, and all lifestyle factors simultaneously. Cohort-specific
and sex-specific results were similar and were pooled with the use of an inverse-
variance–weighted meta-analysis.

Consumo di formaggio e peso corporeo

RESEARCH ARTICLE

Dairy Products

Molecular Nutrition
Food Research
www.mnf-journal.com

Effects of Dairy Products Consumption on Body Weight

Figure 3. Net change (WMD, 95% CI) in body composit
by energy restriction in body composition associated wit
minus the change during the control regimen. The diam
Horizontal lines denote the 95% CIs; solid diamonds repr
the intervention effect.

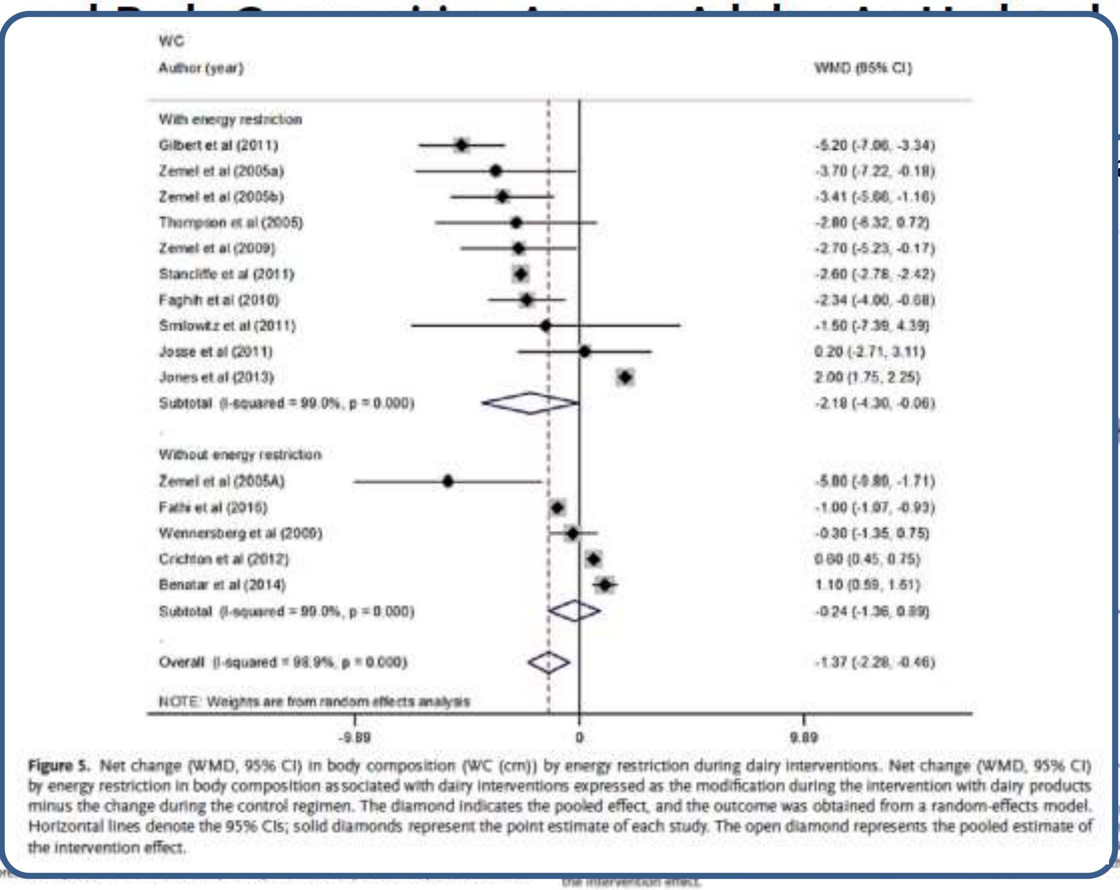
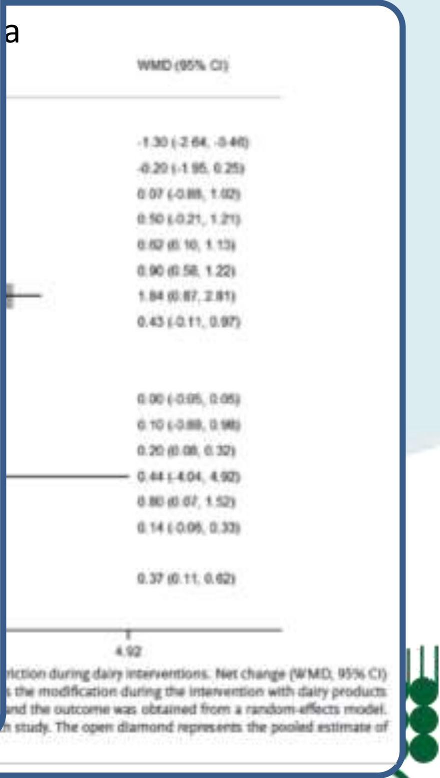


Figure 5. Net change (WMD, 95% CI) in body composition (WC (cm)) by energy restriction during dairy interventions. Net change (WMD, 95% CI) by energy restriction in body composition associated with dairy interventions expressed as the modification during the intervention with dairy products minus the change during the control regimen. The diamond indicates the pooled effect, and the outcome was obtained from a random-effects model. Horizontal lines denote the 95% CIs; solid diamonds represent the point estimate of each study. The open diamond represents the pooled estimate of the intervention effect.



riction during dairy interventions. Net change (WMD, 95% CI)
s the modification during the intervention with dairy products
nd the outcome was obtained from a random-effects model.
h study. The open diamond represents the pooled estimate of
the intervention effect.

Conclusions: This meta-analysis suggests a beneficial effect of
dy weight and body composition.
bsence of caloric restriction may

Mol. Nutr. Food Res. **2018**, 62, 1700410

tion on overweight and obesity.[10] However, the meta-analysis was subjected to the residual or unmeasured confound-

Centr

Latte e derivati: fanno bene o fanno male?

food & nutrition
research

Co-Action Publishing

REVIEW ARTICLE

Milk and dairy products: good or bad for human health? An
assessment of the totality of scientific evidence

Tanja Kongerslev Thorning[1], Anne Raben[1], Tine Tholstrup[1], Sabita S
Ian Givens[3] and Arne Astrup[1]*

[1]Department of Nutrition, Exercise and Sports, Faculty of Science, University of Co
[2]Division of Human Nutrition, Wageningen University, Wageningen, The Netherlar
Health, University of Reading, Reading, UK

Abstract

Background: There is scepticism about health effects of dairy products
increasing intake of plant-based drinks, for example, from soy, rice, al
Objective: This review aimed to assess the scientific evidence mainly
studies and randomised controlled trials, on dairy intake and risk of ob
disease, osteoporosis, cancer, and all-cause mortality.
Results: The most recent evidence suggested that intake of milk and dairy pro
of childhood obesity. In adults, intake of dairy products was shown to impr
weight loss during energy restriction. In addition, intake of milk and dairy prod
reduced risk of type 2 diabetes and a reduced risk of cardiovascular disease, pa
evidence suggested a beneficial effect of milk and dairy intake on bone mineral de
of bone fracture. Among cancers, milk and dairy intake was inversely associated
cancer, gastric cancer, and breast cancer, and not associated with risk of pancreatic ca
cancer, while the evidence for prostate cancer risk was inconsistent. Finally, consumption
was not associated with all-cause mortality. Calcium-fortified plant-based drinks have
alternative to dairy products in the nutrition recommendations in several countries. However,
milk and plant-based drinks are completely different foods, and an evidence-based conclusion on the
the plant-based drinks requires more studies in humans.
Conclusion: The totality of available scientific evidence supports that intake of milk and dairy products contribute to meet nutrient recommendations, and may protect against the most prevalent chronic diseases, whereas very few adverse effects have been reported.

Keywords: *obesity; type 2 diabetes; cardiovascular disease; osteoporosis; cancer; mortality*

DAIRY INTAKE AND HEALTH

Adult obesity → Body composition ↓

Childhood obesity ↓

Type 2 diabetes →(↓)

Cardiovascular disease →(↓) Stroke ↓

Bone fractures → Bone mineral density ↓

Colorectal cancer Bladder cancer Gastric cancer Breast cancer ↓

Prostate cancer →(↑)

Pancreatic cancer Ovarian cancer Lung cancer →

Mortality →

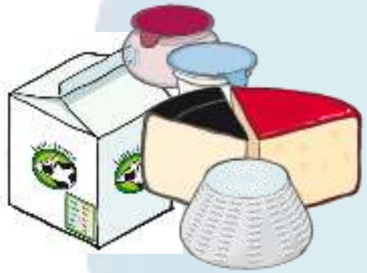
Raccomandazioni sul consumo di latticini in Europa

Albania	🥛 200 🥣 180 🧀 60/90	3/d	Lettonia	🥛🥣 250	3/d
Austria	🥛 200 🥣 180 🧀 50/60	3/d	Macedonia	🥛🥣 200 🧀 25	2-3/d
Belgio	🥛 160 🥣 125 🧀 30/75	3/d	Malta	🥛 250 🥣 150 🧀 30/40	2/d
Bulgaria	🥛 200 🥣 200 🧀 50	2/d	Norvegia	🥛 200 🥣 125 🧀 20	3/d
Croazia	🥛 500 🥣 500	1/d	Olanda	🥛 150 🥣 150 🧀 40	2-3/d
Danimarca	🥛 250 500	1/d	Polonia	🥛🥣 250 🧀 30	2/d
Estonia	🥛 200 🥣 100 🧀 20/35	2-4/d	Portogallo	🥛 250 🥣 200 🧀 40/50	2-3/d
Finlandia	🥛🥣 500/600 + 🧀 20/35	1/d	Regno Unito	🥛 200 🥣 150 🧀 Sc. fiamm	1/d
Francia	🥛 250 🥣 125 🧀 30	3/d	Romania	🥛🥣 250 🧀 50	2-3/d
Georgia	🥛 250 + 🥣 125 + 🧀 30	1/d	Slovenia	🥛 200 🥣 125 🧀 30/60	2-3/d
Germania	🥛 200 250 + 🧀 50/60	1/d	Spagna	🥛 200 2 🥣 200 250 🧀 40/120	2-4/d
Grecia	🥛 200 🧀 30	2-3/d	Svezia	🥛🥣 200 500	1/d
Irlanda	🥛 200 🥣 125 🧀 25	3/d	Svizzera	🥛 200 🥣 150 200 🧀 30/60	3/d
Islanda	🥛 200 🧀 50	2/d	Turchia	🥛 200 🥣 200 🧀 Sc. fiamm	2/d bambini 3-4/d
Italia	🥛 125 🥣 125 3/d 🧀 50/100	3/w	Ungheria	🥛 200 🥣 200 🧀 30/50	3-4/d

Latte nelle scuole per gli ALUNNI degli Istituti scolastici primari Italiani che abbiano fatto richiesta

La tipologia delle distribuzioni

Macro categorie di prodotto	Specifiche	Distribuzioni	
		Regolari	Speciale
1. Latte alimentare pastorizzato, intero, parzialmente scremato e scremato	a) Latte fresco pastorizzato di alta qualità	SI	SI
	b) Latte fresco pastorizzato	SI	SI
	c) Latte pastorizzato microfiltrato	SI	SI
	d) Latte pastorizzato	SI	SI
	e) Latte pastorizzato a temperatura elevata e ESL (Extended Shelf-Life)	SI	SI
2. Latte alimentare delattosato	f) per gli alunni che avranno indicato problemi di intolleranze o allergie	SI	SI
3. Yogurt, yogurt delattosato e altri prodotti lattiero – caseari fermentati	a) Senza succo di frutta aggiunti	SI	SI
	b) Aromatizzati naturalmente	SI	SI
4. Formaggi a pasta molle e filata		NO	SI
5. Formaggi a pasta semidura		NO	SI
6. Formaggi a pasta dura		SI	SI
7. Merenda alternativa (succhi 100 % frutta fresca)		SI	SI
8. Miele, frutta fresca, frutta disidratata, frutta in guscio		NO	SI



DISTRIBUZIONE GRATUITA!

Concludendo

- I prodotti lattiero caseari sono importantissimi per la salute di denti e ossa.
- Hanno alta biodisponibilità del calcio e basso costo.
- Forniscono un cocktail di nutrienti (Ca, K, P, proteine, vitamine)
- Possono aiutare al mantenimento del peso corporeo e della massa magra, anche tramite l'elevato potere saziante.
- Sono associati ad un effetto protettivo sulle malattie croniche
- I formaggi, soprattutto se stagionati, possono costituire un'alternativa nei soggetti con grave intolleranza al lattosio.

- Sussistono una serie di validi motivi per cui gli "esperti" consigliano il consumo di prodotti lattiero-caseari