



	1. (texture* adj1 modif* adj (food or foods or diet or diets or meal or
	meals)).ti,ab,kw.
COCHARANE via	2. ((puree or pureed or mince* or blend* or chop* or soft or soften* or thicken* or
Central	liquid* or liquef*) adj1 (food or foods or diet or diets or meal or meals or fluid or
	fluids)).mp.
	3. 1 or 2
	1. (texture* adj1 modif* adj (food or foods or diet or diets or meal or
MEDLINE (Ovid)	meals)).ti,ab,kw.
	2. ((puree or pureed or mince* or blend* or chop* or soft or soften* or thicken* or
	liquid* or liquef*) adj1 (food or foods or diet or diets or meal or meals or fluid or
	fluids)).mp.
	3. 1 or 2
	4. limit 3 to "humans only (removes records about animals)"
	5. limit 4 to ("young adult (19 to 24 years)" or "adult (19 to 44 years)" or "young
	adult and adult (19-24 and 19-44)" or "middle age (45 to 64 years)" or "middle aged (45
	plus years)" or "all aged (65 and over)" or "aged (80 and over)")
	1. (texture* adj1 modif* adj (food or foods or diet or diets or meal or
EMBASE (Ovid)	meals)).ti,ab,kw.
	2. ((puree or pureed or mince* or blend* or chop* or soft or soften* or thicken* or
	liquid* or liquef*) adj1 (food or foods or diet or diets or meal or meals or fluid or
	fluids)).mp.
	3. 1 or 2
	4. limit 3 to "humans only (removes records about animals)"
	5. limit 4 to (adult <18 to 64 years> or aged <65+ years>)
	1. TITLE-ABS-KEY ((texture* W/1 modif*) W/1 (food* or diet* or meal*))
SCOUPUS	2. TITLE-ABS-KEY ((puree* or mince* or blend* or chop* or soft or soften* OR
	thicken* or liquid* or liquef*) W/1 (food* or diet* or meal* or fluid*))
	3. 1 and 2
	1. texture* N1 modif* N1 (food* or diet* or meal*
CINAL PLUS	2. ((puree* or mince* or blend* or chop* or soft or soften* or thicken* or liquid* or
(EBSCOhost)	liquef*) N1 (food* or diet* or meal* or fluid*))
	3. 1 or 2
Search Results	Search date: 5th May, 2019
	1. CENTRAL-(Cochrane Central Register of Controlled Trials), 1450 results
	2. MEDLINE (Ovid), 2313 results.
	3. EMBASE (Ovid), 2887 results
	4. SCOPUS, 51 results, 2 more result was found at 25th June, 2019
	5. CINAL Plus (EBSCOhost), 464 results

Table S1. Search strategy.





Table S2. Eligible study categorisation by study design	s.
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	TMDs compared v	with regular diet $n = 13$
Observational	TMDs/TFs compa	red with infant cereal fortified $n = 2$
<i>N</i> = 18	TMDs and TFs wi	th/without enteral feed/IV $n = 2$
	Pureed diet witho	ut comparison <i>n</i> = 1
		Use of shaped TMDs $n = 2$
	RCT	TFs with/without free water access $n = 2$
	<i>n</i> = 5	Powder TFs compared with Pre-TFs $n = 1$
	Cross-over	Powder TFs compared with Pre-TFs $n = 1$
Experimental	<i>n</i> = 2	Use of small frequent meal pattern $n = 1$
<i>N</i> = 17		Use of shaped/moulded TMDs $n = 6$
		Use of fortified (and shaped) TMDs $n = 3$
	Pre-post <i>n</i> = 10	Use of fortified and shaped TMDs $n = 1$
		Education intervention <i>n</i> = 1



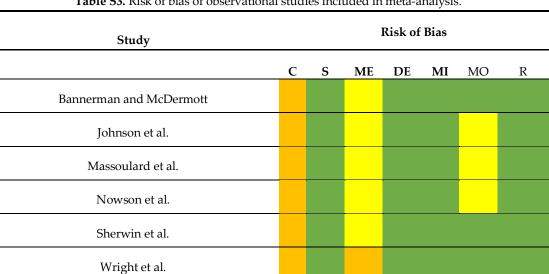


Table S3. Risk of bias of observational studies included in meta-analysis.

Low	Moderate	Serious	Critical

(C) Confounding bias

(S) Selection bias

(ME) Measurement of Exposure

(DE) Departures from exposure

(MI) Missing data

(MO) Measurement of Outcomes

(R) Reported results





14010 01	. Outcome data for stu			uunuoi	i uuequuey,		it of the metalo,		noumption		
Outcomes	Study		Nutrition Intake Dietary Adequacy Nutrition content ntion Control Intervention/ Control/Std Intervention								
		Intervention TMDs	Control TMDs	Std	P value	Intervention/ TMDs	Control/Std	Interventi on/TMDs	Control TMDs/S td	P value	
Meal	Cassen et al.	15% increase									
consumption %	<i>de Sa et al.</i> (meal)		B: 75.3 S: 74.2	79.7							
	(meal + ONS)		B: 78.0 S: 68.9	74.2							
	ONS (morning vs afternoon tea)		B: 82.6 vs 100 S: 84.7 vs 96.8	81.9 vs 58.3							
	Farrer et al.		0			week of moulded		0.09)			
	Higashiguchi	Enzyme-infused	TMDs showed a	slightly ↑	consumptio	on compared to un	modified TMDs	(69.6% vs 68.7	%, p > 0.05)		
	Keller et al.	NS ↑ by using m	ix of cMTF and rM	MTF com	pared to cM	TF ($p = 0.1$)					
	Kennewell and Kokkinakos	NS↑ with infant	 ↑ by using mix of cMTF and rMTF compared to cMTF (<i>p</i> = 0.1) ↑ with infant cereal fortified puree 								
	Miles et al. `		P: 59% MM: 55% S: 52%	43%							
	Torrence	Significant ↑ con	sumption of brea	kfast (p=.	007) <i>,</i> dinner	(p=.017) and desse	ert (p=.005) with	pre-shaped p	uree		
	Wright et al. `		13% (n=4)								



	1										
	Zanini et al			of the texture-ind	dividuali	sed TMDs w	vere fully or partially	consumed res	pectively		
% of Energy eaten	Nowson et	al.		S: 76.7 (24.5) P: 74.1 (19.8)	82.2 (16.9)						
Energy (kcal/d)	Bannerman McDermott		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					0.001			
	Beck and H	lansen``					Chopped diet m DRI of 2100 kd		C: 2050 B: 2170	2400	
	Cassen et a	1.	41% increased ir	ntake							
	Dahl et al.			1074 (202)							
									1666 (78)	2120	< 0.001
	Durant									(222)	
		Day 1		19.2 (5.1)	20.0 (5.4)	NS	79.6 (18.6) %	81.9 (20.0) %			
		Day 7		18.1 (6.2)	19.4	NS	75.7 (24.1) %	77.0 (17.8)			
	Foley et al.	Day 11		20.6 (6.0)	(5.9) 20.5	NS	86.1 (27.0) %	% 79.0 (20.9)			
	kcal/kg/d	Day 14		22.0 (5.0)	(5.0) 21.3 (6.2)	NS	94.0 (18.0) %	% 81.3 (18.2) %			
		Day 21		19.4 (6.2)	22.3 (9.0)	NS	84.1 (23.4) %	84.1 (28.6) %			
	Germain et	al.	1947 (317)	1603 (366)		0.08	Both pre-/post inte	ervention had i	nadequate int	ake (2000 k	cal/d)







		1		T	MDPI			
Higashiguchi	1097.2 (395)	1036.4 (349.3)		<0.05	Both pre-/post intervention ha inadequate intake (1200-150 kcal/d)			
Johnson et al.		1291 (140)	1380 (207)	0.100	Both diets had inadequate intake (1900 kcal/d)	1786	2153	
Keller et al. (per plate)	142.7 (35.3)	143.1 (35.3)		1.0				
Massoulard et al.		C: 1764.3 (283.2) M: 1499.2 (308.8)	1627. 0 (447.1)		All diets had inadequate intake	(30-40 kcal/kg/	′d)	
McCormick et al. ``		582 (241)	267 (50)	0.0001				
Nowson et al.		S: 932.1 (501.9) P: 908.2 (167.3)	1123. 3 (454.1)	<0.001				
Ott et al.	1611.1	1417.7		<0.05	Adequate (1630 kcal/d) intake a Inadequate intake pre-intervent	-	l fortified.	
Philip et al.	1534 (310)	1305 (282)			Both groups had appropria intake (1029-1326 kcal/d)	te 2462 (310)	2057 (294)	
Reyes-Torres et al. (kcal/kg/d)	40 (15)	34 (10)		0.11				
Sherwin et al.		S: 908.2 (47.8) H: 1027.7 (47.8)	1338. 4 (47.8)	<0.05				



he he	althcare					M	DPI				
	Taylor and Barr	1342 (177)	1325 (207)		0.565				1651 (177)	1661 (185)	NS
	Vucea et al.								1800.9 (507.2)	2058.4 (397.1)	NS
	Welch et al.	2460.5 (93.1)	1662.5 (121.6)		<0.001	Adequate (19 Inadequate in			rtified cereal a ntion	nd ONS	
	Wright et al. % of requirements meet		927 (339)	1462 (615)	<0.0001	-609 (255) 60%	-85 (565) 95%	<. 0 0 0 1			
	Zanini								1850		
Protein (g/d)	Bannerman and McDermott		44.4 (12.4)	49.6 (10.4)	0.23	Both met the DF	RV				
	Beck and Hansen `` % of energy content					All below DRV		0g),	C: 12 B: 11	13%	
	Cassen et al.	36% increased in	take								
	Dahl et al.		54 (19)			43% and 87% of from 2 province provide 59g/d of inadequacy were able to p (low risk of i	es were able (moderate r); 0% and 40 provide 78g/	e to isk 1% d	57.9 (7.9) 85.4 (31.1)		
	Durant								67 (2)	74 (7)	<.001

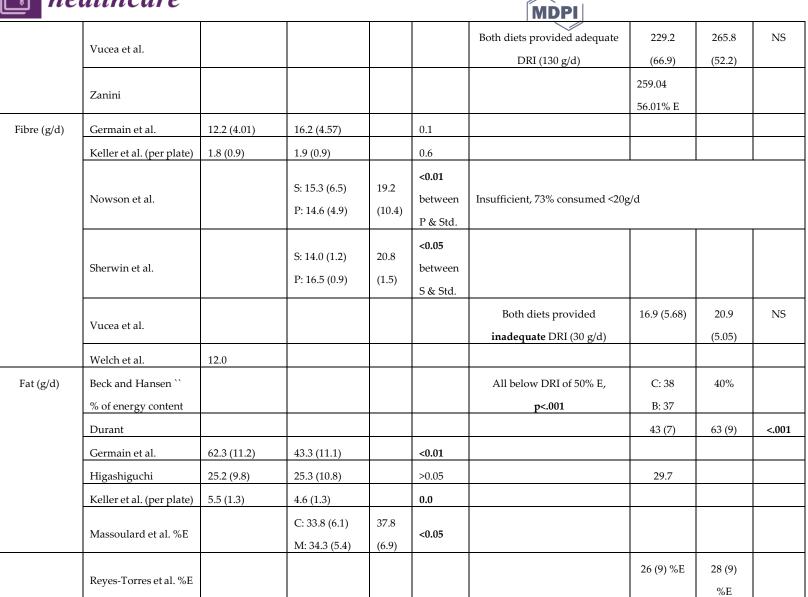


he he	althc	are					MDPI		
		Day 1		0.69 (0.17)	0.84 (0.28)	NS			
		Day 7		0.67 (0.28)	0.85 (0.27)	NS			
	Foley et al. g/kg/d	Day 11		0.76 (0.26)	0.87 (0.22)	NS	Both diets had inadequate intake	(1.0 g/kg/d)	
		Day 14		0.89 (0.19)	0.80 (0.23)	NS			
	Day 21 Germain et al.			0.71 (0.29)	0.90 (0.31)	NS			
			83.1 (21.2)	56.6 (19.8)		.03	Met lower limit (1.0-1.3 g/kg/d) p	re-intervention	
	Higashiguchi	49.9 (18.1)	40.0 (14.1)		<.01		64.1		
	Johnson et a	al.		56.0 (7.0)	56.0 (11.0)	0.849	Both diets had adequate intake (46.0 g/d)	78.0	88.0
	Keller et al.	(per plate)	10.6 (5.0)	9.7 (5.0)		0.4			
	Massoularc	l et al.		C: 69.7 (10.2) M: 68.0 (15.7)	62.4 (16.8)		Lower limit DRI (1.0g/kg/d)		
	McCormick	k et al. ``		15 (7)	7 (3)	0.001			
	Nowson et	al.		S: 46.8 (18.8) P: 41.7 (15.2)	48.9 (18.0)	NS			
	Ott et al.	69.0	40.4		<0.01	Adequate (60 g/d) intake after sha Inadequate intake pre-interventio	-	ď	
	Philip et al.	(g/kg/d)	1.04 (0.29)	1.00 (0.30)			↓ risk of inadequate intake (0.8 g/kg/d) was in fortified TMDs (8% vs 16%)		1.54 (0.39)



MDPI **Reyes-Torres** et 1.8 (0.7) 19 (5)% E 17 (5)%E 1.4 (0.5) 0.35 al.(g/kg/d) S: 49.8 (3.1) 62.2 Sherwin et al. < 0.05 H: 39.5 (1.9) (2.9) Both diets provided adequate 82.2 (23.6) 86.5 NS Vucea et al. DRV (56 g/d) (20.7) Welch et al. (g/kg/d) 2.33 (0.09) 1.58 (0.11) Both diets met DRV (0.8g/kg/d) < 0.0001 Wright et al. -22 (16.9) 55% -6 (24.8) .0 60 % of requirements 40 (18.6) 0.003 91% 1 (27) 3 meet 65.81 Zanini 13.08 % E 8.3 NSP (g/d) 6.3 (1.7) ~ 35% (2.7) ~ Bannerman and Both were sig. less than DRI (19g/d), p<.001 0.03 McDermott DRV 46%DRV Carbohydrates Durant 320 (38) 255 (6) <.001 (g/d) 272 (44.5) 254 (66.8) Germain et al. 0.55 Higashiguchi 166.7 (61.6) 161.4 (54.9) >0.05 207 Keller et al. (per plate) 15.8 (4.9) 0.3 14.6 (4.9) C: 48.0 (5.5) 45.5 Massoulard et al. %E M: 46.7 (5.2) (7.2)56 (11) %E 55 (12)% Reyes-Torres et al. %E Е







MDPI

	Zanini							63.5	5	
	Zanini							30.91	%Е	
Fluid (ml/d)	Bannerman and McDermott		1196 (288) ~ 75% estimated requirement	1611 (362)	0.002	TMDs were sig. le s (n=1) on TMD met		< .001; 33.3% (1	n=5) on Std,	and 6.7%
	Philip et al.	301 (103)	301 (103)			100% risk of inac (1500ml/d) in both	-		594 (209)	
	Taylor and Barr	698 (156)	612 (176)		0.003			1148 (177)	1116 (387)	NS
			Dysphagia diet + TF	Enter al feed → Dysp hagia diet + TF		Dysphagia diet+TF	Enteral feed → Dysphagi a diet + TF			
	Finestone et al.		755 (162)	984 (486)		Met 33 (5) % of fluid requirements (2278 (331) ml/d)	Met 43 (20) % of fluid requireme nts (2294 (276) ml/d)			
	Garon et al.	TF+ water 1318 (855 + 463)	TF only 1210	-	on TF, NS all intake					



Karagian nis et al.	Interven tion vs control	1767 (10.7)	1378 (33.7)				\checkmark				
nis et al.					<0.001						
	post- vs pre-	1767 (10.7)	1428 (7.0)		≤0.001						
			TMD +TF +External fluid	TMD +TF							
Vivanti et a	1.		2165 (867)	1174 (455)	<0.001	Inadequate by T	rmd+tf o	nly			
		Pre-thickened	Powder- thickened								
McCormick	et al. ``	795 (346)	785 (202)		0.47						
Whelan		554 (173)	278 (233)		0.04						
et al.		547 (391)	490 (484)		NS	Mean daily intak	e was 455	ml/d,	only meet 22%	% of the requ	irements
de Sa et	al. % of					S: 80.0	76.2	.0			
inadequacy	* (>UL)					B: 85.2		09			
Germain et	al.	3270 (915)	2781 (297)		0.32						
Higashiguc	hi	2302.4 (873.9)	2261.8 (989.5)		>0.05						
Keller et al.	(per plate)	323.8 (114.5)	257.2 (114.5)		0.2				2042		
Vuene -t.1						Both diets provi	ded adequ	ate	2775.9	3140.7	NS
vucea et al.						DRI (2300	mg/d)		(920.3)	(830.2)	
de Sa et inadequacy						S: 100.0 B: 100.0	100.0	N /			
	McCormick Whelan et al. de Sa et nadequacy Germain et Higashiguci Keller et al. Jucea et al.	Vivanti et al. Vivanti et al. McCormick et al. `` Whelan et al. de Sa et al. % of nadequacy * (>UL) Germain et al. Higashiguchi Keller et al. (per plate) Vucea et al. de Sa et al. % of	pre- /ivanti et al. /ivanti et al. Pre-thickened McCormick et al. `` 795 (346) McCormick et al. `` 795 (346) Whelan 554 (173) et al. 547 (391) de Sa et al. % of Germain et al. 3270 (915) Higashiguchi 2302.4 (873.9) Keller et al. (per plate) 323.8 (114.5) /ucea et al. He Sa et al. % of	pre- TMD +TF +External fluid /ivanti et al. 2165 (867) /ivanti et al. Pre-thickened /ivanti et al. 795 (346) McCormick et al. 547 (391) 490 (484) 490 (484) de Sa et al. % of Germain et al. 3270 (915) Sagan guesti 2302.4 (873.9) Keller et al. (per plate) 323.8 (114.5) Vucea et al. Image: Sage: Sa	pre- TMD +TF TMD +External +TF fluid +TF /ivanti et al. - 2165 (867) 1174 /ivanti et al. - Pre-thickened 1174 /ivanti et al. - Pre-thickened - McCormick et al. 795 (346) 785 (202) - McCormick et al. 554 (173) 278 (233) - whelan 547 (391) 490 (484) - de Sa et al. % of - - - Germain et al. 3270 (915) 2781 (297) - Higashiguchi 2302.4 (873.9) 2261.8 (989.5) - Vucea et al. (per plate) 323.8 (114.5) 257.2 (114.5) - /ucea et al. % of - - - - /ucea et al. % of - - - - /ucea et al. % of - - - /ucea et al. % of - - - /ucea et al. % of - - - -	pre- Image: constraint of the section of	pre- - <td>pre-</td> <td>pre-readr</td> <td>pre-ref</td> <td>pre-i.e.i</td>	pre-	pre-readr	pre-ref	pre-i.e.i



MDPI 309 (689) Germain et al. 3913 (665) 0.04 Both diets met the DRI 2988 3064 2116 2148 (322) 0.798 Johnson et al. (492) (2000mg/d) Both diets provided 3111.3 3103.2 NS Vucea et al. inadequate DRI (4700 mg/d) (1035.6)(768.3)19. Fe (mg/d) S: 0.0 de Sa et al. % of 0.02 8 B: 40.7 7 inadequacy 13.9 (3.95) Germain et al. 15.6 (4.34) 0.45 TMD had **inadequate** intake 10.010.3 14.8Johnson et al. 8.0 (1.0) 0.002 (3.0) (10.0 mg/d) Increased 57% iron content P:4.22 Kennewell and 2.69 Kikkinakos (per MM: 4.11 2.62 meal) All diets contained S:16.9 13.0 <.05 Moreira et al. ** insufficient DRI (18 mg/d) B:9.3 Appropriate intake (10 mg/d) in Philip et al. 34.0 (7.0) 16.0 (3.0) 54 (11) 20(4) both groups Both diets provided adequate 11.3 (3.17) 13.6 <.01 Vucea et al. DRI (9 mg/d) (3.32)Adequate (10 Adequate 22.9 (1.14) 18.1 (1.29) < 0.0007 Welch et al. mg/d) Zn (mg/d) de Sa et al. % of S: 20.0 69.0 <.00 inadequacy B: 48.2 1 14.6 (4.42) 7.69 (3.44) Germain et al. < 0.01





				-			DPI				
	Johnson et al.		6.1 (1.3)	6.8 (2.0)	0.174	Both diets die DRI (12	d not mee 2.0mg/d)	t the	8.6	9.7	
	Moreira et al. **					Both standard and blend contained insufficient Zn content (11 mg/d)		S:21.0 B:10.48	8.5	<.05	
	Vucea et al.					Both diet	s provideo DRI (11 m		9.31 (3.88)	10.6 (3.22)	<.01
	Welch et al.	18.1 (0.7)	10.0 (0.6)		<0.0001	Adequate (12 mg/d)	Inade	quate			
Ca (mg/d)	de Sa et al. % of inadequacy					S: 40.0 B: 88.9	76.2	.006			
	Germain et al.	1347 (644)	865 (257)		0.1						
	Johnson et al.		667 (170)	660 (243)	0.916	Both diets did not meet the DRI (800mg/d)		1241	1342		
	McCormick et al. ``		544 (156)	25 (8)	0.0001						
	Nowson et al.		S: 366.1 (180.6) P: 356.8 (155.8)	437.9 (127.2)	NS	All diets had inadequate intake, ↓ prevalence of inadequate intak TMDs (9 vs 95%)		94% consumed	d <75% RDI		
	Philip et al.	1310 (332)	507 (120)					ke (800 mg/d) i	in fortified		
	Sherwin et al.		S: 405 (50) H:513 (41)	544 (27)	NS						
	Vucea et al.					Both diet inadequate D	s provideo PRI (1200 n		1031.4 (459.4)	1016.3 (373.8)	NS





	Welch et al.	2272 (51.2)	888.8 (71.2)	<0.001	Both diets me					
Mg (mg/d)	de Sa et al. % of				S: 90.0	59.5	.0			
	inadequacy				B: 85.2		64			
	Germain et al.	366 (92.2)	253 (74.1)	0.02						
	Vucea et al.				Both diets pro		(1)	265.4	315.1	<.01
					inadequate DRI			(94.7)	(74.6)	
	Welch et al.	521.3 (12.9)	208.8 (13.2)	<0.0001	Adequate	Inadeo	quat			
	Weich et al.	521.5 (12.5)	200.0 (10.2)	<0.0001	(280/350 mg/d)	e				
Cu (mg/d)					S: 70.0	42.1	0.			
	de Sa et al. % of				B: 40.7		56			
	inadequacy						3			
					Soft diet contained	l insuffic	rient	S:0.71	0.97	<.05
	Moreira et al. **				Cu content (0.	9 mg/d)		B: 1.00		
					Both diets provide	ed adequ	ıate	1.08 (0.55)	1.41	NS
	Vucea et al.				DRI (0.9 m	g/d)			(0.88)	
Mn (mg/d)	de Sa et al. % of				S: 80.0	24.6	.0			
	inadequacy				B: 37.0		04			
					Soft diet contained	l insuffic	rient	S:1.72	3.34	NS
	Moreira et al. **				Mn content (2.	3 mg/d)		B: 3.09		
					Both diets provide	ed adequ	ıate	2.98 (1.38)	4.32	NS
	Vucea et al.				DRI (2.3 m	g/d)			(1.38)	
P (mg/d)					S: 10.0	17.5	0.			
	de Sa et al. % of				B: 11.1		40			
	inadequacy						9			





	Vucea et al.					Both diets provid	led adequat	te 1355.8	1465.9	NS
						DRI (700 1	mg/d)	(440.1)	(362.3)	
	Welch et al.	2520 (64.8)	1307.2 (84.8)		<0.0001	Both diets met DF	RV (800 mg/	/d)	1	I
Se (ug/d)	de Sa et al. % of					S: 10.0		0.		
	inadequacy					B: 33.3		52 4		
	Moreira et al. **					Blend diet p	rovided	S:0.06	0.07	NS
						inadequate DR	I (55 ug/d)	B: 0.05		
	Vucea et al.					Both diets provid	led adequat	te 0.874	1.163	NS
	vucca et al.					DRI (55 u	ıg/d)	(0.445)	(0.352)	
	Philip et al.	1705 (31)				Appropriate intak	ke (800/1000	RAE/d) in both	groups	r
Vitamin A						Both diets provid	led adequat	te 982.4	1061.8	NS
(ugRE/d)	Vucea et al.					DRI (900 R	AE /d)	(503.9)	(618.0)	
	Welch et al.	2133.9 (72.9)	891.9 (72.9)		<0.0001	Both diets met DF	RV (800/100	0 RAE/d)		
Vitamin C (mg/d)	Adolphe et al.	228 (67)	151 (78)		0.007	All met DRI (90 mg/d)	90% met D	RI		
	Germain et al.	175.0 (44.4)	182.0 ()76.1		0.82					
	Johnson et al.		104.0 (18.0)	89.0 (29.0)	0.027	Both diets met mg/d		113.0	124.0	
	McCormick et al. ``		170 (134)	35 (48)	0.001					
	Philip et al.	117 (39)				Appropriate inta both groups	ke (60mg/c	d) in 184 (38)	184 (38)	
	Vucea et al.					Both diets provid	•		130.6	NS
						DRI (90 n	ng/d)	(69.1)	(74.0)	





					-					
	Welch et al.	180.2 (5.4)	78.6 (6.42)		<0.0001	Both diets met D	DRV (60mg/d)	-		
Vitamin D (ug/d)	Adolphe et al.	12.2 (3.3)	2.1 (2.2)		0.005	0% met DRI fortificatior				
	Germain et al.	10.1 (5.35)	5.19 (2.01)		0.05					
	Johnson et al. (IU/d)		131 (51)	157 (77)	0.209	Both diets did DRI (200		396	445	
	McCormick et al. ``		5 (2)	0 (0)	0.00001					
	Nowson et al.		S: 0.8 (0.5) P: 1.9 (0.5)	1.0 (0.8)	NS	Insufficient, 91% ug/				
	Vucea et al.					Both diets inadequate D	-	8.42 (4.43)	7.52 (3.78)	<0.01
	Welch et al. (IU/d)	614 (14)	175 (20.2)		<0.0001	Adequate (200IU/d)	Inadequate			
Vitamin E (mg/d)	Johnson et al.		12.0 (2.4)	13.0 (3.8)	0.256	Both diets met mg/		16.0	21.0	
	Vucea et al.					Both diets inadequate D	-	5.46 (2.68)	6.74 (2.40)	<0.01
	Welch et al.	21.72 (0.65)	4.5 (0.46)		<0.0001	Adequate (8.0 mg/d)	Inadequate			
Thiamin (mg/d)	Adolphe et al.	1.7 (0.3)	0.8 (0.3)		0.005	All met DRI (1.2 mg/d)	10% met DRI			
	Germain et al.	1.92 (0.68)	1.54 (0.4)		0.2					
	Johnson et al.		1.0 (0.2)	1.3 (0.3)	0.007	Both diets met mg/		1.4	1.8	





	Philip et al.	2.33 (0.63)	0.80 (0.20)			↓ prevalence of in (1.0/1.2 mg/d) ir (0 vs 57%)	1	3.91	1.18 (0.38)	
	Vucea et al.					Both diets provi DRI (1.2	-	1.38 (0.60)	1.67 (0.50)	NS
	Welch et al.	2.56 (0.08)	1.24 (0.08)		<0.0001	Both diets met D			,	-
Riboflavin (mg/d)	Adolphe et al.	2.2 (0.4)	1.2 (0.4)		0.005	All met DRI (1.3 mg/d)	30% met DRI			
	Germain et al.	3.00 (1.22)	1.78 (0.56)		0.02					
	Johnson et al.		1.4 (0.2)	1.5 (0.4)	0.083	Both diets m		2.2	2.6	
	Philip et al.	2.98 (0.74)	1.2 (0.3)			↓ prevalence of in (1.2/1.4 mg/d) ir (0 vs 28%)	•	5.00	1.83 (0.44)	
	Vucea et al.					Both diets provi DRI (1.3	-	2.28 (0.94)	2.43 (1.03)	NS
	Welch et al.	3.96 (0.11)	1.82 (0.12)		<0.0001	Both diets met D	RV (1.2 mg/d)			
Niacin (mg/d)	Adolphe et al.	24.0 (6.0)	19.0 (5.0)		0.007	All met DRI (16 mg/d)	70% met DRI			
	Germain et al.	36.2 (10.9)	22.2 (8.01)		0.01					
	Philip et al.	27.35 (6.81)	13.5 (3.4)			↓ prevalence of in (13/15 mg/d) in f vs 55%)	-	43.67	19.03 (4.52)	
	Vucea et al.					Both diets provi DRI (16	-	28.8(12.3)	34.8 (9.85)	NS





							JEI			
	Welch et al.	29.89 (1.08)	21.45 (1.69)		<0.0001	Both diets met D	ORV (13/15 mg/d))		
Vitamin B6 (mg/d)	Adolphe et al.	2.7 (0.6)	1.6 (0.6)		0.007	All met DRI (1.7 mg/d)	30% met DRI			
	Johnson et al.		1.1 (0.3)	1.4 (0.5)	0.029	Both diets did DRI (1.6		1.2	1.6	
	Vucea et al.					Both diets inadequate D	-	1.48 (0.62)	1.68 (0.52)	NS
	Welch et al.	1.70 (0.04)	1.34 (0.10)		<0.006	Adequate (1.6 mg/d)	Inadequate			
Folacin (ug/d)	Adolphe et al.	505 (86)	114 (58)		0.005	All met DRI (400 ug/d)	0% met DRI			
	Johnson et al.		166 (22)	189 (62)	0.069	TMD had inad (180 u	•	214	281	
	Philip et al.	160 (52)				47 (female)/97% inadequate inta in both groups			264 (71)	
	Vucea et al.					Both diets inadequate D	-	267.8 (117.5)	375.0 (126.1)	<0.01
Vitamin B12 (mg/d)	Adolphe et al.	5.1 (1.4)	3.4 (1.2)		0.007	All met DRI (2.4 mg/d)	90% met DRI			
	Johnson et al.		3.2 (0.8)	3.6 (1.3)	0.219	Both diets had a (2.0 m	-	5.1	6.2	
	Vucea et al.					Both diets prov DRI (2.4	-	5.13 (3.04)	5.55 (4.89)	NS



MDPI

	Welch et al.	6.41 (0.18)	1.78 (0.17)	<0.0001	Adequate (2.0 mg/d)	Inadequate			
Pantothenic Acid (mg)	Adolphe et al.	5.7 (1.0)	3.1 (1.1)	0.005	90% met DRI (5 mg/d)	0% met DRI			
	Vucea et al.				Both diets prov DRI (5 1	-	10.4 (33.0)	22.3 (49.5)	<0.01
Vitamin K (mcg)	Vucea et al.				Both diets inadequate DR	-	88.2 (95.3)	1103 (101.1)	<0.01

Note. `Percentage of participants completed 100% of the meal

`` Results from Beck and Hansen McCormick et al. study was expressed as Median (Interquartile Range)

* % of inadequate intake including either lower than Estimated Average Requirements or above Upper Limits

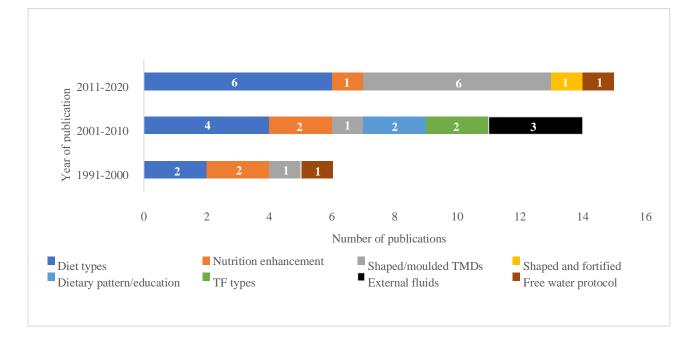
** Results from Moreira et al. study was the mean value calculated from 3 occasions

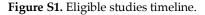
TMD - Texture modified diet; TF - Thickened fluid; S - Soft diet; B - Blend diet; P- Pureed diet; C - Chopped diet; M - Mixed diet; MM - Minced and moist; H -

Homogenised; Std – Standard diet; ONS – Oral nutrition supplement; DRI – Dietary reference intake



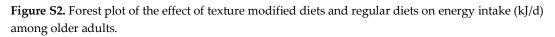






Note. Nutrition enhancement includes oral nutrition supplements and nutrient fortification; TMDs– Texture 4 modified diets; TF–Thickened fluids; External fluids includes enteral feeds and intravenous therapy; Free water 5 protocol regarding free access of water for patients on TFs.

	Regu	lar diet	S	Texture	modified	diets		Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI		
Bannerman and McDermott	1,596	260	15	1,312	326	15	8.4%	284.00 [72.98, 495.02]			
Johnson et al.	1,380	207	31	1,291	140	20	13.2%	89.00 [-6.26, 184.26]			
Massoulard et al.	1,627	447.1	49	1,764.3	283.2	12	8.6%	-137.30 [-340.64, 66.04]			
Massoulard et al.	1,627	477.1	49	1,499.2	308.8	26	9.6%	127.80 [-50.90, 306.50]			
Nowson et al.	1,123.3	454.1	114	932.1	501.9	48	10.2%	191.20 [26.55, 355.85]			
Nowson et al.	1,123.3	454.1	114	908.2	167.3	53	13.2%	215.10 [120.35, 309.85]			
Sherwin et al.	1,338.4	47.8	36	908.2	47.8	13	15.2%	430.20 [399.89, 460.51]	+		
Sherwin et al.	1,338.4	47.9	36	1,027.7	47.8	26	15.3%	310.70 [286.57, 334.83]	*		
Wright et al.	1,462	615	25	927	339	30	6.5%	535.00 [265.12, 804.88]	· · · · · ·		
Total (95% CI)			469			243	100.0%	230.90 [140.79, 321.02]	+		
Heterogeneity: Tau ² = 13705.	01; Chi ² = 1	104.70,	df = 8 (P < 0.0000)1); l ² = 92	%			to to to to		
Test for overall effect: Z = 5.02	2 (P < 0.00)	001)			200				-500 -250 Ó 250 500 Favours ITMDs1 Favours (Regular diets)		



	Regular diets Texture modified diets							Mean Difference		Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% Cl		IV, Fixed	d, 95% Cl	
Johnson et al.	660	243	31	667	170	20	1.5%	-7.00 [-120.44, 106.44]	•			
Nowson et al.	437.9	127.2	114	356.8	155.8	53	8.4%	81.10 [33.09, 129.11]			10	
Nowson et al.	437.9	12.72	114	366.1	180.6	48	7.4%	71.80 [20.66, 122.94]			0	
Sherwin et al.	544	27	36	513	41	26	59.1%	31.00 [12.94, 49.06]				
Sherwin et al.	544	27	36	405	50	13	23.6%	139.00 [110.42, 167.58]				•
Total (95% CI)			331			160	100.0%	63.14 [49.26, 77.03]			-	-
Heterogeneity: Chi ² =	41.36, 0	if = 4 (P	< 0.000	101); I ² = 9	0%				400			100
Test for overall effect:	1.6.6 00000000	STATISTIC - 1993							-100	-50 Favours [TMDs]	0 50 Favours (Regular o	100 [°] liets]

Figure S3. Forest plot of the effect of texture modified diets and regular diets on calcium intake (mg/d) among older adults.





IV, Random, 95% Cl
+
+
-
5)

Figure S4. Forest plot of the effect of texture modified diets and regular diets on protein intake (g/d) among older adults.

	Traditi	onal TI	MDs	Shap	ed TM	Ds		Mean Difference	Mean Difference	Risk of Bias
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI	ABCDEFG
Germain	1,603	366	8	1,947	317	7	17.7%	-344.00 [-689.64, 1.64]		
Higashiguchi	1,980	540	57	2,200	370	57	73.1%	-220.00 [-389.94, -50.06]		
Reyes-Torres	1,836	476	16	2,400	900	18	9.3%	-564.00 [-1040.72, -87.28]	·	
Total (95% CI)			81			82	100.0%	-273.83 [-419.08, -128.58]	•	
Heterogeneity: Chi ² =	: 1.97, df =	= 2 (P =	0.37);1	l² = 0%					-1000 -500 0 500 10	
Test for overall effect	Z = 3.70	(P = 0.)	0002)						Favours [Shaped] Favours [Traditio	
Risk of bias legend										
(A) Random sequen	ce genera	ation (s	election	1 bias)						
(B) Allocation concea	ilment (se	election	bias)							
(C) Blinding of partici	pants and	d perso	nnel (p	erforma	nce bi	as)				
(D) Blinding of outcor	ne asses	sment	(detect	ion bias)					
(E) Incomplete outco	me data (attrition	i bias)							
(F) Selective reporting	g (reportin	ng bias)							
(0) 011 11										

(G) Other bias

Figure S5. Forest plot of the effect of shaped and traditional texture modified diets on energy intake (kcal/d) among older adults.

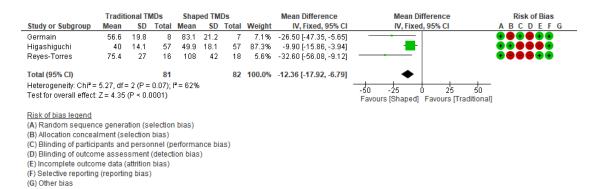


Figure S6. Forest Plot of the effect of shaped and traditional texture modified diets on protein intake (g/d) among older adult.