## <u>The health effects of a low-inflammatory diet in adults with</u> <u>arthritis: systematic review and meta-analysis</u>

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### Supplementary Tables, Figures and Search Syntax:

Supplementary Table 1: Table illustrating which measures were multiplied by -1

PROM	Low Score	High score	Multiply by -1?
Physical Health:			
- HAQ		Poor Health	No
- AIMS2 Physical		Poor Health	No
- SF-36 Physical	Poor Health		Yes
General Health:			
- VAS Global	Poor Health		No
- VAS Health	Poor Health		No
- SF-36 Global Health	Poor Health		No
Pain Scores:			
- SF-36 bodily pain	Poor Health		Yes
- Pain VAS		Poor Health	No
- AIMS2 Symptom		Poor Health	No
- ICOAP Total		Poor Health	No

Supplementary Table 2: Risk of Bias assessment for non-randomised trials utilising Cochrane's ROBINS-I tool

Domain	Adam et. al. 2003	McKellar et. al. 2007
Bias due to confounding	Low risk	Serious risk
Bias in selection of participants into the study	Low risk	Low risk
Bias in classification of interventions	Low risk	Moderate risk
Bias due to deviations from intended interventions	Moderate risk	Low risk
Bias due to missing data	Moderate risk	Low risk
Bias in measurement of outcomes	Moderate risk	Moderate risk
Bias in selection of the reported result	Moderate risk	Low risk
Overall	Moderate risk	Serious risk

Author and Year	Was a dietitian involved in the designing of the <u>dietary</u> intervention ?	Was the dietary intervention a partial or full simulation of the low inflammatory/Mediterrane an diet?	Was there monitoring of adherence to the dietary intervention?	Was a validated tool utilised to measure dietary adherence?
Dyer et. al., 2017	Not Specified	Full simulation of Mediterranean Diet	Yes, a 7 day food diary (start, middle and end) + compliance score	No - self developed compliance score 0-100
Skoldstam et. al., 2003	Not Specified	Modified Mediterranean for Swedish people.	Yes, 3 week BD meal program, weekly dietician phone and 3rd weelky visits	No, had questionairres and dietary interviews to assess adherence, but no specific mention of any validated tool utilised.
Garcia Morales et. al., 2019	Yes	Full simulation of Mediterranean Diet	Yes, however used a 24hr food recall questionairre	No
Schell et. al., 2017	Not Specified	Partial simulation of Low inflammatory diet	Yes - 3 day food dirary (week 6, 12, 14, 20, 26)	No
Du et. al., 2019	Not Specified	Partial simulation of Low inflammatory diet	Yes, calenders were given to patients to remind them of consumption, but compliance was based on self reporting.	No
Mckellar et. al., 2007	Not Specified	Partial simulation of Mediterranean Diet (refer to it as "Mediterranean- type diet")	Yes, using FFQ questionairres	Yes
Adam et. al., 2003	Not Specified	Modified AID (lactoveg)	Yes - monthly conseling with 3 days recorded prior to vist	No

Supplementary Table 3: Assessing risk of bias in the dietary interventions implemented in the studies.

### Supplementary Table 4: Individual study intervention results

Outcome	<ul> <li>Specific Measure</li> </ul>	Study 👻	N= 🔻	0-2 Months MEAI	0-2 Months SE 🔻	2-4 Months MEAI 🔻	2-4 Months SI 🔻	4-6 months MEAI 🔻	4-6 months Sl 💌
Weight Change	Kg	Adam 2003	30			-0.1	2.9		
		Garcia Morales 2019	35					-2.4	2.4265
		Skoldstam 2003	26			-3	3.8425		
		Dyer 2017	22			-1.5	3.8751		
Weight Change	BMI	Du 2019	27			0	1.838477		
		Schell 2017	17			0.2	2.0518		
Change in	ESR	Skoldstam 2003	26	7	5.3852	1	4.1602		
Inflammatory									
Markers									
	(hs/)CRP	Skoldstam 2003	24 (0-2m) / 25 (2-4m)	10	11.9181	-5	5		
	(,)	Schell 2017	17			-1.1	1.5		
	II -6	Schell 2017	17			-5.4	0.6403		
		Dver 2017	29			-1.76	1,1463		
	II-1B	Schell 2017	17			-11.1	4.0608		
		Dver 2017	29			-0.47	0.3666		
PROM		Skoldstam 2003	26 (n=25 for 0-2m)	-0.1	0 1401	-0.1	0.1266		
	HAQ(/-DI) - (measure functional status in		20 (11 20 101 0 211)	0.1	0.1101	0.1	0.1200		
	RA, OA, etc.)								
		Garcia Morales 2019	35					0.55	0.6
		Schell 2017	17			-0.2	0.1414		
	AIM52 Physical (subscore assessing physical function - high score equals poor health - can correlate with HAQ scores)	byer 2017	49	U	0.3239	-0.1	0.2931		
	SF-36 physical function	Skoldstam 2003	26			-2.5	15.2		
		Garcia Morales 2019	35					-4.6	22.8
	DAS28 (Measure of RA disease activity)	Skoldstam 2003	26	-0.2	0.3616	-0.5	0.3328		
	VAS Global	Skoldstam 2003	26	-4	5.9646	-12	5.0115		
	VAS Health	Schell 2017	17			0.3	0.2236		
	SF-36 Global Health	Skoldstam 2003	26			5.7	14.6		
		Garcia Morales 2019	35					-0.5	25.7
	SF-36 Bodily Pain	Skoldstam 2003	26			-4.5	24.3		
		Garcia Morales 2019	35					-4.2	24.3
	Pain VAS	Skoldstam 2003	26	-2	5.831	-12	4.6781		
		Schell 2017	17			-0.6	0.2236		
	AIMS2 Symptom (Pain	) Dyer 2017	49	-0.1	0.5459	-0.3	0.5153		
	ICOAP (Total Pain)	Schell 2017	17			-16	4.827		
ROM	Knee Flexion	Dyer 2017	33			10	5.2223		
	Hip Rotation	Dyer 2017	33			14	4.324		
	Hip Flexion	Dyer 2017	33			5	3.8925		

### Supplementary table 5: Individual study control/usual diet results

Outcome	Specific Measures	Study 🗸	N=	0-2 Months MEAN	0-2 Months SD	2-4 Months MEAN	2-4 Months SD 💌	4-6 months MEAN 💌	4-6 months SD 💌
Weight Change	Kg	Adam 2003	30			0.9	1.7		
		Garcia Morales 2019	27					-0.8	2.4591
		Skoldstam 2003	23			-0.4	3.8041		
		Dyer 2017	17			0.8	5.8326		
Weight Change	BMI	Du 2019	22			1.1	1.9799		
		Schell 2017	17			0.2	2.1213		
Change in	ESR	Skoldstam 2003	25	-1	4.2426	2	4.8415		
Inflammatory Markers									
Warkers	(hs/)CRP	Skoldstam 2003	23	-3	3 4704	0	3 8448		
	(1.5) / CTU	Schell 2017	17		5.1701	-0.9	1.4422		
	II -6	Schell 2017	17			-0.1	1 456		
	12 0	Dver 2017	25			-0.22	0.4115		
	II -1B	Schell 2017	17			-2.4	4,1761		
		Dver 2017	25			0.19	0.4136		
PROM	HAO(/-DI) - (measure	Skoldstam 2003	23	-0.1	0 1769	0	0.1769		
	functional status in RA, OA, etc.)	Sholosani 2005	20	0.2	0.1705		0.1703		
		Garcia Morales 2019	27					0.82	0.68
		Schell 2017	17			0	0.1414		
	AIMS2 Physical (subscore assessing physical function - high score equals poor health - can correlate with HAQ scores)	Dyer 2017	49	-0.1	0.3839	-0.1	0.3839		
	SF-36 physical function	Skoldstam 2003	25			-1.4	13.4		
		Garcia Morales 2019	27					0	17.3
	DAS28 (Measure of RA disease activity)	Skoldstam 2003	23	-0.1	0.4128	0	0.4278		
	VAS Global	Skoldstam 2003	25	-2	5.8	-1	5.8		
	VAS Health	Schell 2017	17			0	0.1414		
	SF-36 Global Health	Skoldstam 2003	25			0.7	21.7		
		Garcia Morales 2019	27					-7.8	18.8
	SF-36 Bodily Pain	Skoldstam 2003	25			-4	20.1		
		Garcia Morales 2019	27					4.4	30.8
	Pain VAS	Skoldstam 2003	25	2	6.2482	3	5.8		
		Schell 2017	17			-0.4	0.2828		
	AIMS2 Symptom (Pain	Dyer 2017	49	-0.6	0.5459	-0.6	0.5557		
	ICOAP (Total Pain)	Schell 2017	17			-5.5	4.3139		
ROM	Knee Flexion	Dyer 2017	28			-5	6.2593		
	Hip Rotation	Dyer 2017	28			-1	5.3486		
	Hip Flexion	Dyer 2017	28			1	2.8094		



Supplementary Figure 1: Risk of Bias assessment for randomised trials using Cochrane's ROB-V2 methodology

	Low In	flammatory	Diet	U	sual Diet			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	\$D	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
1.4.1 Osteoarthritis									
Du et al. 2019	0	1.838477	27	1.1	1.9799	22	20.9%	-0.57 [-1.14, 0.01]	
Dyer et al. 2017	-1.5	3.8751	22	0.8	5.8326	17	16.7%	-0.47 [-1.11, 0.17]	
Schell et al. 2017	0.2	2.0518	17	0.2	2.1213	17	15.3%	0.00 [-0.67, 0.67]	
Subtotal (95% CI)			66			56	52.9%	-0.37 [-0.73, -0.01]	
Heterogeneity: Tau <sup>2</sup> = 0.0	0; Chi <sup>2</sup> =	1.71, df = 2 (	P = 0.43	); I <sup>2</sup> = 09	%				
Test for overall effect: Z =	2.02 (P =	0.04)							
1.4.2 Rheumatoid Arthrit	is								
Adam et al. 2003	-0.1	2.9	30	0.9	1.7	30	26.4%	-0.42 [-0.93, 0.10]	
Sköldstam et al. 2003	-3	3.8425	26	-0.4	3.8041	23	20.7%	-0.67 [-1.25, -0.09]	<b>-</b>
Subtotal (95% CI)			56			53	47.1%	-0.53 [-0.91, -0.14]	
Heterogeneity: Tau <sup>2</sup> = 0.0	0; Chi <sup>2</sup> =	0.41, df = 1 (	P = 0.52	); I <sup>2</sup> = 09	%				
Test for overall effect: Z =	2.69 (P =	0.007)							
Total (95% CI)			122			109	100.0%	-0.45 [-0.71, -0.18]	◆
Heterogeneity: Tau <sup>2</sup> = 0.0	0: Chi <sup>2</sup> =	2.46. df = 4 (	P = 0.65	); $ ^2 = 0.9$	%			-	
Test for overall effect: Z =	3.32 (P =	0.0009)							-1 -U.5 U U.5 1
Test for subaroup differer	nnae: Ch	= 1 h ` 2 2 0 = ≊i	1 (P = 0)	57) I <sup>2</sup> =	- 0%				Favours (Low Initiam Diet) Favours (Osual Diet)

# <u>Supplementary Figure 2: Subgroup analysis of weight change by diagnosis following 2-4 months of intervention/control</u>

	Low In	flammatory	Diet	U	sual Diet		:	Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	\$D	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
1.5.1 Randomised Trials									
Du et al. 2019	0	1.838477	27	1.1	1.9799	22	20.9%	-0.57 [-1.14, 0.01]	
Dyer et al. 2017	-1.5	3.8751	22	0.8	5.8326	17	16.7%	-0.47 [-1.11, 0.17]	
Schell et al. 2017	0.2	2.0518	17	0.2	2.1213	17	15.3%	0.00 [-0.67, 0.67]	
Sköldstam et al. 2003 Subtotal (95% CI)	-3	3.8425	26 <b>92</b>	-0.4	3.8041	23 <b>79</b>	20.7% <b>73.6%</b>	-0.67 [-1.25, -0.09] - <b>0.46 [-0.76, -0.15]</b>	
Heterogeneity: Tau <sup>2</sup> = 0.0	0; Chi <sup>z</sup> =	2.44, df = 3 (	P = 0.49	); I <sup>z</sup> = 09	6				
Test for overall effect: Z =	2.92 (P =	0.004)							
1.5.2 Prospective Study									
Adam et al. 2003 Subtotal (95% CI)	-0.1	2.9	30 <b>30</b>	0.9	1.7	30 30	26.4% <b>26.4%</b>	-0.42 [-0.93, 0.10] -0.42 [-0.93, 0.10]	
Heterogeneity: Not applica	able								
Test for overall effect: Z =	1.59 (P =	0.11)							
Total (95% CI)			122			109	100.0%	-0.45 [-0.71, -0.18]	◆
Heterogeneity: Tau <sup>2</sup> = 0.0	0; Chi²=	2.46, df = 4 (	P = 0.65	); I <sup>z</sup> = 09	6			-	
Test for overall effect: Z =	3.32 (P =	0.0009)							Favours [Low Inflam Diet] Favours [Usual Diet]
Test for subgroup differer	ices: Chi	² = 0.02, df =	1 (P = 0	.89), I²=	:0%				· · · · · · · · · · · · · · · · · · ·

<u>Supplementary Figure 3: Subgroup analysis of weight change by study type following 2-4 months of intervention/control</u>

#### A) Change in CRP at 2-4 months



#### B) Change in IL-6 at 2-4 months

	Low Inf	lammatory	y Diet	U	sual Diet			Mean Difference	Mean Di	fference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Rando	m, 95% Cl
Dyer et al. 2017	-1.76	1.1463	29	-0.22	0.4115	25	50.3%	-1.54 [-1.99, -1.09]		
Schell et al. 2017	-5.4	0.6403	17	-0.1	1.456	17	49.7%	-5.30 [-6.06, -4.54]		
Total (95% CI)			46			42	100.0%	-3.41 [-7.09, 0.28]		-
Heterogeneity: Tau <sup>2</sup> = 6 Test for overall effect: 2	6.97; Chi <sup>a</sup> Z = 1.81 (F	* = 70.37, d P = 0.07)	lf=1 (P <	< 0.0000	01); I <sup>2</sup> = 9	9%			-4 -2 Favours [Low Inflam Diet]	2 4 Favours [Usual Diet]

#### C) Change in IL-18 at 2-4 months



# <u>Supplementary Figure 4: Meta-analysis of change in specific inflammatory biomarkers after 2-4 months of</u> intervention/control.

	Low Infl	ammatory	Diet	U	sual Diet		:	Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	<b>SD</b>	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% Cl
2.7.1 Osteoarthritis									
Dyer et al. 2017	-1.76	1.1463	29	-0.22	0.4115	25	35.4%	-1.71 [-2.34, -1.08]	
Schell et al. 2017 Subtotal (05% CI)	-5.4	0.6403	17	-0.1	1.456	17	29.0%	-4.60 [-5.94, -3.26]	
Heterogeneity: Tau <sup>2</sup> = 3.8 Test for overall effect: Z =	39; Chi² = 2.14 (P =	14.55, df= 0.03)	40 1 (P = 0	.0001);	I <sup>z</sup> = 93%	42	04.470	-5.05 [-5.32, -0.20]	
2.7.2 Rheumatoid Arthri	tis								
Sköldstam et al. 2003 Subtotal (95% CI)	-5	5	25 <b>25</b>	0	3.8448	23 <b>23</b>	35.6% <b>35.6%</b>	-1.10 [-1.71, -0.49] - <b>1.10 [-1.71, -0.49]</b>	<b></b>
Heterogeneity: Not applic Test for overall effect: Z =	able 3.52 (P =	0.0004)							
		•							
Total (95% CI)			71			65	100.0%	-2.33 [-3.82, -0.84]	
Heterogeneity: Tau <sup>2</sup> = 1.5	53; Chi <b>=</b> :	21.67, df=	2 (P < 0	.0001);	l² = 91%				
Test for overall effect: Z =	3.06 (P =	0.002)							Favours (Low Inflam Diet) Favours (Usual Diet)
Test for subgroup differe	nces: Chi	<sup>e</sup> = 1.83, df	= 1 (P =	0.18), P	²= 45.3%				r avouro (zow milani bied) i avouro (obdar bied)

# <u>Supplementary Figure 5: Meta-analysis of change in any inflammatory biomarker by diagnosis after 2-4 months</u> of intervention/control.

	Low Infl	lammatory	Diet	U	sual Diet		1	Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% Cl
3.11.1 Osteoarthritis									
Dyer et al. 2017	-0.1	0.2931	49	-0.1	0.3839	49	37.2%	0.00 [-0.40, 0.40]	-+-
Schell et al. 2017	-0.2	0.1414	17	0	0.1414	17	29.4%	-1.38 [-2.14, -0.62]	<b>_</b>
Subtotal (95% CI)			66			66	66.6%	-0.65 [-2.00, 0.70]	
Heterogeneity: Tau <sup>2</sup> = 0.8	36; Chi <b>²</b> = 1	10.03, df=	1 (P = 0	.002); I <sup>z</sup>	= 90%				
Test for overall effect: Z =	: 0.94 (P =	0.34)							
3.11.2 Rheumatoid Arth	ritis								
Sköldstam et al. 2003	-0.1	0.1266	26	0	0.1769	23	33.4%	-0.65 [-1.22, -0.07]	
Subtotal (95% CI)			26			23	33.4%	-0.65 [-1.22, -0.07]	◆
Heterogeneity: Not appli	cable								
Test for overall effect: Z =	: 2.20 (P =	0.03)							
									-
Total (95% CI)			92			89	100.0%	-0.62 [-1.39, 0.14]	$\bullet$
Heterogeneity: Tau <sup>2</sup> = 0.3	37; Chi <b>=</b> -	11.06, df=	2 (P = 0	.004); I <sup>z</sup>	= 82%			-	
Test for overall effect: Z =	: 1.59 (P =	0.11)							Favours [Low Inflam Diet] Eavours [Lisual Diet]
Test for subgroup differe	nces: Chi	<sup>2</sup> = 0.00, df	= 1 (P =	0.99), P	²=0%				ravours (Low milan Dreg Favours (Osual Dreg

<u>Supplementary Figure 6: Meta-analysis of change in any physical function outcomes by diagnosis after 2-4</u> months of intervention/control.



#### <u>Supplementary Figure 7: Meta-analysis of change in any general health measure after 2-4 months of</u> intervention/control.



<u>Supplementary Figure 8: Meta-analysis of change in any pain scores by diagnosis after 2-4 months of intervention/control.</u>

	Low Infl	lammatory	Diet	U	sual Diet			Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
1.6.1 Full Low Inflammat	ory Dlet								
Adam et al. 2003	-0.1	2.9	30	0.9	1.7	30	26.4%	-0.42 [-0.93, 0.10]	
Dyer et al. 2017	-1.5	3.8751	22	0.8	5.8326	17	16.7%	-0.47 [-1.11, 0.17]	
Sköldstam et al. 2003 Subtotal (95% CI)	-3	3.8425	26 <b>78</b>	-0.4	3.8041	23 <b>70</b>	20.7% 63.8%	-0.67 [-1.25, -0.09] - <b>0.51 [-0.84, -0.18]</b>	
Heterogeneity: Tau <sup>2</sup> = 0.0	0; Chi <sup>z</sup> = 0	).44, df = 2 (	P = 0.80	); I <sup>z</sup> = 09	ю				
Test for overall effect: Z =	3.05 (P = I	0.002)							
1.6.2 Partial Low Inflamm	natory Die	et	27	1 1	1.0700	22	20.004	0.67[1.14.0.01]	
Schell et al. 2019 Schell et al. 2017 Subtotal (95% CI)	0.2	2.0518	17 44	0.2	2.1213	17 39	15.3% 36.2%	-0.37 [-1.14, 0.01] 0.00 [-0.67, 0.67] - <b>0.31 [-0.87, 0.24]</b>	
Heterogeneity: Tau <sup>2</sup> = 0.0 Test for overall effect: Z =	6; Chi² = 1 1.10 (P = 1	.59, df = 1 ( 0.27)	P = 0.21	); I² = 37	'%				
Total (95% CI)			122			109	100.0%	-0.45 [-0.71, -0.18]	◆
Heterogeneity: Tau <sup>2</sup> = 0.0	0; Chi² = 2	2.46, df = 4 (	P = 0.65	); I <sup>z</sup> = 09	%				
Test for overall effect: Z =	3.32 (P = I	0.0009)							Favours [Low Inflam Diet] Favours [Usual Diet]
Test for subaroup differer	nces: Chi <sup>z</sup>	= 0.37. df =	1(P = 0	.55), l <sup>2</sup> =	:0%				r aroaro (zon milan biog i r aroaro (oodar biog

<u>Supplementary Figure 9: Subgroup analysis of weight change by nature of intervention (full vs partial low-inflammatory diet) following 2-4 months of intervention/control.</u>



Supplementary Figure 10: Meta-analysis of change in any inflammatory biomarker nature of intervention (full vs partial low-inflammatory diet) after 2-4 months of intervention/control (Note: A meta-analysis comparing interventions that resulted in weight loss compared to no weight loss produced the same analysis. Weight loss included the same trials as full low-inflammatory diet, no weight loss included the same trials as partial low-inflammatory diet, no weight loss included the same trials as partial low-inflammatory diet, no weight loss included the same trials as partial low-inflammatory diet, no weight loss included the same trials as partial low-inflammatory diet.



Supplementary Figure 11: Meta-analysis of change in any physical function outcomes by nature of intervention (full vs partial low-inflammatory diet) after 2-4 months of intervention/control. (Note: A meta-analysis comparing interventions that resulted in weight loss compared to no weight loss produced the same analysis. Weight loss included the same trials as full low-inflammatory diet, no weight loss included the same trials as partial low-inflammatory diet).



Supplementary Figure 12: Meta-analysis of change in any pain scores by nature of intervention (full vs partial low-inflammatory diet) after 2-4 months of intervention/control. (Note: A meta-analysis comparing interventions that resulted in weight loss compared to no weight loss produced the same analysis. Weight loss included the same trials as full low-inflammatory diet, no weight loss included the same trials as partial low-inflammatory diet.



### <u>Supplementary Figure 13: Meta-analysis of physical function change when comparing low inflammatory diet to</u> <u>usual diet following 0-2 months of the intervention/control.</u>



Supplementary Figure 14: Meta-analysis of pain score change when comparing low inflammatory diet to usual diet following 0-2 months of the intervention/control.

#### SEARCH SYNTAX:

A. Syntax for MEDLINE, EMBASE, CENTRAL and Cochrane Databases for Systematic Reviews (note: this syntax would be used using the OvidSP Platform searching through the four databases):

1. arthritis/

- 2. arthritis, psoriatic/
- 3. exp arthritis, rheumatoid/
- 4. exp osteoarthritis/
- 5. (arthritis adj5 (psoriatic or psoriasis)).tw.
- 6. (arthritis adj5 rheumatoid).tw.
- 7. (arthritis adj5 (seronegative or seropositive)).tw.
- 8. osteoarthritis.tw.
- 9. arthritis, reactive/
- 10. spondylitis, ankylosing/
- 11. (arthritis adj5 reactive).tw.
- 12. (spondylitis adj5 ankylosing).tw.
- 13. (arthritis adj5 IBD-related).tw.
- 14. (arthritis adj5 IBD-associated).tw.
- 15. or/1-14
- 16. limit 15 to "all adult (19 plus years)"
- 17. (low Inflammatory adj3 diet\*).tw.
- 18. (low Inflammatory adj3 dietary pattern\*).tw.
- 19. (low Inflammatory adj3 type diet\*).tw.
- 20. (anti-Inflammatory adj3 diet\*).tw.
- 21. (anti-Inflammatory adj3 dietary pattern\*).tw.
- 22. (anti-Inflammatory adj3 type diet\*).tw.
- 23. Diet, Mediterranean/
- 24. (mediterranean adj3 diet\*).tw.
- 25. (mediterranean adj3 dietary pattern\*).tw.
- 26. (mediterranean adj3 type diet\*).tw.
- 27. MedDiet.tw.
- 28. MeDi.tw.
- 29. MeDiet.tw.
- 30. ((crete or cretan) adj4 diet\*).tw.
- 31. animals/ not (animals/ and humans/)
- 32. or/17-30
- 33. 16 and 32
- 34. 33 not 31
- 35. remove duplicates from 34

### B. Syntax for CINAHL

S1	arthritis
S2	psoriatic arthritis
<b>S</b> 3	rheumatoid arthritis
<b>S</b> 4	osteoarthritis
S5	arthritis N5 (psoriasis OR psoriatic)
S6	arthritis N5 (rheumatoid)
S7	arthritis N5 (seronegative OR seropositive)
<b>S</b> 8	TX osteoarthritis
S9	reactive arthritis
S10	ankylosing spondylitis
S11	arthritis N5 (reactive)
S12	spondylitis N5 (ankylosing)
S13	arthritis N5 (IBD-related)
S14	arthritis N5 (IBD-associated)
S15	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14
S16	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 Limiters - Human; Age Groups: Adult: 19-44 years, Middle Aged: 45-64 years, Aged: 65+ years, Aged, 80 and over
S17	low inflammatory N3 (diet)
S18	low inflammatory N3 (dietary pattern)
S18 S19	low inflammatory N3 (dietary pattern) low inflammatory N3 (type diet)
S18 S19 S20	low inflammatory N3 (dietary pattern) low inflammatory N3 (type diet) mediterranean diet
<ul><li>S18</li><li>S19</li><li>S20</li><li>S21</li></ul>	Iow inflammatory N3 (dietary pattern)         Iow inflammatory N3 (type diet)         mediterranean diet         Mediterranean N3 (Diet)
<ul><li>S18</li><li>S19</li><li>S20</li><li>S21</li><li>S22</li></ul>	Iow inflammatory N3 (dietary pattern)         Iow inflammatory N3 (type diet)         mediterranean diet         Mediterranean N3 (Diet)         Mediterranean N3 (Dietary pattern)
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> </ul>	Iow inflammatory N3 (dietary pattern)Iow inflammatory N3 (type diet)mediterranean dietMediterranean N3 (Diet)Mediterranean N3 (Dietary pattern)Mediterranean N3 (type diet)
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> <li>S24</li> </ul>	low inflammatory N3 (dietary pattern) low inflammatory N3 (type diet) mediterranean diet Mediterranean N3 (Diet) Mediterranean N3 (Dietary pattern) Mediterranean N3 (type diet) TX MedDiet
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> <li>S24</li> <li>S25</li> </ul>	low inflammatory N3 (dietary pattern) low inflammatory N3 (type diet) mediterranean diet Mediterranean N3 (Diet) Mediterranean N3 (Dietary pattern) Mediterranean N3 (type diet) TX MedDiet TX MeDi
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> <li>S24</li> <li>S25</li> <li>S26</li> </ul>	low inflammatory N3 (dietary pattern) low inflammatory N3 (type diet) mediterranean diet Mediterranean N3 (Diet) Mediterranean N3 (Dietary pattern) Mediterranean N3 (type diet) TX MedDiet TX MeDiet
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> <li>S24</li> <li>S25</li> <li>S26</li> <li>S27</li> </ul>	low inflammatory N3 (dietary pattern) low inflammatory N3 (type diet) mediterranean diet Mediterranean N3 (Diet) Mediterranean N3 (Dietary pattern) Mediterranean N3 (type diet) TX MedDiet TX MeDi TX MeDi (crete or cretan) N4 diet
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> <li>S24</li> <li>S25</li> <li>S26</li> <li>S27</li> <li>S28</li> </ul>	low inflammatory N3 (dietary pattern) low inflammatory N3 (type diet) mediterranean diet Mediterranean N3 (Diet) Mediterranean N3 (Dietary pattern) Mediterranean N3 (type diet) TX MedDiet TX MeDiet TX MeDi (crete or cretan) N4 diet Anti-inflammatory N3 (diet)
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> <li>S24</li> <li>S25</li> <li>S26</li> <li>S27</li> <li>S28</li> <li>S29</li> </ul>	low inflammatory N3 (dietary pattern) low inflammatory N3 (type diet) mediterranean diet Mediterranean N3 (Diet) Mediterranean N3 (Dietary pattern) Mediterranean N3 (type diet) TX MedDiet TX MeDi TX MeDi (crete or cretan) N4 diet Anti-inflammatory N3 (dietary pattern)
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> <li>S24</li> <li>S25</li> <li>S26</li> <li>S27</li> <li>S28</li> <li>S29</li> <li>S30</li> </ul>	Iow inflammatory N3 (dietary pattern)         Iow inflammatory N3 (type diet)         mediterranean diet         Mediterranean N3 (Diet)         Mediterranean N3 (Dietary pattern)         Mediterranean N3 (type diet)         TX MedDiet         TX MeDi         TX MeDiet         (crete or cretan) N4 diet         Anti-inflammatory N3 (dietary pattern)         anti-inflammatory N3 (type diet)
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> <li>S24</li> <li>S25</li> <li>S26</li> <li>S27</li> <li>S28</li> <li>S29</li> <li>S30</li> <li>S31</li> </ul>	low inflammatory N3 (dietary pattern) low inflammatory N3 (type diet) mediterranean diet Mediterranean N3 (Diet) Mediterranean N3 (Dietary pattern) Mediterranean N3 (type diet) TX MedDiet TX MeDiet TX MeDi TX MeDiet (crete or cretan) N4 diet Anti-inflammatory N3 (diet) Anti-inflammatory N3 (dietary pattern) anti-inflammatory N3 (type diet) S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30
<ul> <li>S18</li> <li>S19</li> <li>S20</li> <li>S21</li> <li>S22</li> <li>S23</li> <li>S24</li> <li>S25</li> <li>S26</li> <li>S27</li> <li>S28</li> <li>S29</li> <li>S30</li> <li>S31</li> <li>S32</li> </ul>	Iow inflammatory N3 (dietary pattern) Iow inflammatory N3 (type diet) mediterranean diet Mediterranean N3 (Diet) Mediterranean N3 (Dietary pattern) Mediterranean N3 (type diet) TX MedDiet TX MeDiet TX MeDi TX MeDiet (crete or cretan) N4 diet Anti-inflammatory N3 (diet) Anti-inflammatory N3 (dietary pattern) anti-inflammatory N3 (type diet) S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 Limiters - Human