Table 1: Randomized controlled trial studies included in the systematic review and meta-analysis

Code Author (year) (country)	Subjects	Age and BMI* (mean±SD)	RCT$^{\Delta}$	Intervention	Placebo	Duration (week)	Results
1.1 Acharjee, S. 2015 Israel (25)	Healthy postmenopausal women without metabolic syndrome N=49	Age: 54.6±5.8 BMI: 24.6±3.8	Randomized, controlled, crossover trial	0.5 cups/day soy nuts (containing 25 g of soy protein and 101 mg of aglycone isoflavones)	Non soy protein	8	CRP† decreased significantly
1.2 Acharjee, S. 2015 Israel (25)	Healthy postmenopausal women with metabolic syndrome N=11	Age: 54.1±6.5 BMI: 31.8±4.6	Randomized, controlled, crossover trial	0.5 cups/day soy nuts (containing 25 g of soy protein and 101 mg of aglycone isoflavones)	Non soy protein	8	CRP decreased significantly
2.1 Aubertin-Leheudre, M. 2007 Canada (30)	Obese postmenopausal women N=20	Age: 58 ± 5 BMI: 30±5	Randomized, double-blind, controlled trial	70 mg/day isoflavones (44 mg of diadzein, 16 mg of glycitein, and 10 mg of genistein)	N/M‡	24	CRP did not change significantly
2.2 Aubertin-Leheudre, M. 2007 Canada (30)	Obese postmenopausal women N=20	Age: 58 ± 5 BMI: 30±5	Randomized, double-blind, controlled trial	70 mg/day isoflavones (44 mg of diadzein, 16 mg of glycitein, and 10 mg of genistein)	N/M‡	48	CRP did not change significantly
3.1 Azadbakht, L. 2007 Iran (26)	Postmenopausal women with the metabolic Syndrome N=42	Age: 57±1.94 BMI: 28±1.29	Randomized cross-over clinical trial	30 g/day soy nut (containing 11.25 g/day protein with 84 mg/day isoflavones)	Read meat	8	CRP decreased significantly
3.2 Azadbakht, L. 2007	Postmenopausal women with the metabolic	Age: 57±1.94 BMI: 28±1.29	Randomized cross-over clinical trial	30 g/day soy protein (containing 15 g/day protein with 102 mg/	Read meat	8	CRP decreased significantly

Iran (26)	Syndrome N=42			day isoflavones)			
4.1 Bakhtiari, A 2019 Iran (31)	Older women with metabolic syndrome N=75	Age: 63.8±2.82 BMI: N/M	Randomized, single-blind, controlled clinical trial	35 g/day roasted soy-nut (containing 92.5 mg isoflavines and 13.8 gr protein)	Nothing	12	CRP did not change significantly
4.2 Bakhtiari, A 2019 Iran (31)	Older women with metabolic syndrome N=75	Age: 63.8±2.82 BMI: N/M	Randomized, single-blind, controlled clinical trial	35 g/day textured soy protein (containing 117.2 mg isoflavines and 18.2 gr protein)	Nothing	12	CRP did not change significantly
5 Christie, D. R. 2010 England (32)	Healthy postmenopausal white and African American women N=33	Age: 54.4±3.3 BMI: 35.3±6.0	Randomized, double-blind, controlled trial	soy shakes (containing 20 g soy protein plus 160 mg isoflavones)	Casein without isoflavones	12	CRP did not change significantly
6 Colacurci, N. 2005 Italy (33)	Healthy postmenopausal women N=57	Age: 55.4±3.7 BMI: 25.6±1.6	Randomized, single-blind, controlled clinical trial	60 mg/day isoflavones (30 mg genistein and 30 mg daidzein)	N/M	24	CRP did not change significantly
7 D'Anna, R. 2005 Italy (34)	Healthy Postmenopausal women N=55	Age: 50-60 BMI: N/M	Randomized, double-blind, controlled trial	54mg/day genistein	N/M	24	CRP did not change significantly
8 Gonźalez, S 2007 UK (46)	Postmenopausal women with diet-controlled type 2 diabetes N=26	Age: N/M BMI: 30.7±5.5	Randomized, double-blind, placebo-controlled, crossover	132 mg/day isoflavones (53% genistein, 37% daidzein, and 10% glycitein)	Microcryst alline cellulose	12	CRP did not change significantly
9 Greany, K. A. 2007	Healthy Postmenopausal women	Age: 57.7±6.0 BMI: 25.0±4.3	Randomized, placebo-controlled, crossover	soy protein isolated (26±5g protein containing 44±8mg	Milk protein	6	CRP did not change significantly

USA (35)	N=34			isoflavones per day)			
10 Hall, W. L 2005 UK (27)	Healthy postmenopausalwomen N=113	Age: 57.7± 5.4 BMI: 25±2.9	Randomized, double-blind, placebo-controlled, crossover	50 mg/day isoflavones	cereal bars	8	CRP decreased significantly in intervention group
11 Lebon, J. 2014 Canada (28)	Overweight and obese postmenopausal women N:29	Age: 59.5±4.5 BMI: 29.5±3.8	Randomized, double-blind, controlled trial	70-mg/day daily dose of isoflavones (containing 44 mg of daidzein, 16 mg of glycitein, and 10 mg of genistein)	cellulose	24	CRP decrease significantly
12.1 Jenkins, D. J 2002 Canada (24)	Postmenopausal women N=18	Age: N/M BMI: N/M	Randomized crossover trial	Low isoflavone soy protein foods (supplied 10 mg/day isoflavones and 52 g/ day soy protein)	Regular diet	4	CRP did not change significantly
12.2 Jenkins, D. J 2002 Canada (24)	Postmenopausal women N=18	Age: N/M BMI: N/M	Randomized crossover trial	High isoflavone soy protein foods (supplied 73 mg/day isoflavones and 50 g/ day soy protein)	Regular diet	4	CRP did not change significantly
13.1 Liu, Z. M. 2014 Hong Kong (29)	Healthy postmenopausal women N=270	Age: 57.6±5.3 BMI: 23.2±3.5	Randomized, double-blind, controlled trial	40 g low-fat milk powder + 63 mg daidzein	40 g low-fat milk powder	24	CRP did not change significantly
13.2 Liu, Z. M. 2014 Hong Kong (29)	Healthy postmenopausal women N=270	Age: 57.6±5.3 BMI: 23.2±3.5	Randomized, double-blind, controlled trial	40 g/day soy flour (containing 12.8 g protein and 49.8 mg total isoflavones (23.2 mg daidzein and 19.4 mg genistein))	40 g low-fat milk powder	24	CRP decreased significantly in intervention group

14.1 Liu, Z. M. 2012 Hong Kong (36)	Prediabetes postmenopausal women N=180	Age: 56.4±4.7 BMI: 24.1±3.8	Randomized, double-blind, controlled trial	15-g/day soy protein and 100-mg isoflavone (35 mg daidzin, 59 mg genistin and 4 mg	15 g/day milk protein	12	CRP did not change significantly
14.2 Liu, Z. M. 2012 Hong Kong (36)	Prediabetes postmenopausal women N=180	Age: 56.4±4.7 BMI: 24.1±3.8	Randomized, double-blind, controlled trial	15-g/day soy protein and 100-mg isoflavone (35 mg daidzin, 59 mg genistin and 4 mg	15 g/day milk protein	24	CRP did not change significantly
14.3 Liu, Z. M. 2012 Hong Kong (36)	Prediabetes postmenopausal women N=180	Age: 56.4±4.7 BMI: 24.1±3.8	Randomized, double-blind, controlled trial	100-mg isoflavone (35 mg daidzin, 59 mg genistin and 4 mg glycitin)	15 g/day milk protein	12	CRP did not change significantly
14.4 Liu, Z. M. 2012 Hong Kong (36)	Prediabetes postmenopausal women N=180	Age: 56.4±4.7 BMI: 24.1±3.8	Randomized, double-blind, controlled trial	100-mg isoflavone (35 mg daidzin, 59 mg genistin and 4 mg glycitin)	15 g/day milk protein	24	CRP did not change significantly
15 Llaneza, P. 2011 Spain (47)	Obese postmenopausal women N=87	Age: 56.1±3.51 BMI: 35.2±4.78	Single blind randomized clinical trial	80 mg/day isoflavone (60.8mg of genistein, 16mg of daidzein and 3.2mg of glicitein)	Nothing	24	CRP did not change significantly
16.1 Llaneza, P. 2012 Spain (48)	Obese postmenopausal women N=65	Age: 56.7 ± 3.5 BMI: 30.6±4.7	Single blind randomized clinical trial	80 mg of isofl avones (60.8 mg genistein, 16 mg daidzein and 3.2 mg glicitein)	Nothing	24	CRP did not change significantly
16.2 Llaneza, P. 2012 Spain (48)	Obese postmenopausal women N=65	Age: 56.7 ± 3.5 BMI: 30.6±4.7	Single blind randomized clinical trial	80 mg of isofl avones (60.8 mg genistein, 16 mg daidzein and 3.2 mg glicitein)	Nothing	48	CRP did not change significantly
16.3 Llaneza, P. 2012 Spain	Obese postmenopausal women N=65	Age: 56.7 ± 3.5 BMI: 30.6±4.7	Single blind randomized clinical trial	80 mg of isofl avones (60.8 mg genistein, 16 mg daidzein and 3.2 mg glicitein)	Nothing	72	CRP did not change significantly

(48) 16.4 Llaneza, P. 2012 Spain (48)	Obese postmenopausal women N=65	Age: 56.7 ± 3.5 BMI: 30.6±4.7	Single blind randomized clinical trial	80 mg of isoflavones (60.8 mg genistein, 16 mg daidzein and 3.2 mg glicitein)	Nothing	96	CRP did not change significantly
17.1 Mangano, K. M. 2013 USA (49)	Healthy older women N=97	Age: 73±5.7 BMI: 29.3±6.9	Randomized, double-blind, placebo-control, clinical trial	18 g/day soy protein and isoflavone tablets (105 mg/d isoflavone)	Maltodextrin and animal protein	48	CRP did not change significantly
17.2 Mangano, K. M. 2013 USA (49)	Healthy Older women N=97	Age: 73±5.7 BMI: 29.3±6.9	Randomized, double-blind, placebo-control, clinical trial	105 mg/d isoflavone	Maltodextrin and animal protein	48	CRP did not change significantly
18.1 Nasca, M. M. 2008 USA (50)	Healthy postmenopausal women N=48	Age: N/M BMI:N/M	Randomized, placebo-controlled, crossover	0.5 cups of soy nuts (containing 25 g soy protein and 101 mg aglycone Isoflavones)	Control diet	8	CRP did not change significantly
18.2 Nasca, M. M. 2008 USA (50)	Hypertension postmenopausal women N=12	Age: N/M BMI:N/M	Randomized, placebo-controlled, crossover	0.5 cups of soy nuts (containing 25 g soy protein and 101 mg aglycone Isoflavones)	Control diet	8	CRP did not change significantly
19 Riesco, E. 2012 Canada (51)	Overweight or obese postmenopausal women N=52	Age: 56.2 (52.7-59.7)[φ] BMI: 28.8 (25.2-34.2)	Randomized, double-blind, placebo-control, clinical trial	70 mg/day soy isoflavones	cellulose	24	CRP did not change significantly

20.1 Ryan-Borchers, T. A. 2006 USA (52)	Healthy postmenopausal women N=52	Age: 55.4±3.9 BMI: 27.5±4.9	double-blind, placebo-controlled trial	706 mL soymilk/d (containing 71.6 mg isoflavones and 18 g/ day soy protein)	Cow milk	16	CRP did not change significantly
20.2 Ryan-Borchers, T. A. 2006 USA (52)	Healthy postmenopausal women N=52	Age: 55.4±3.9 BMI: 27.5±4.9	double-blind, placebo-controlled trial	71.6 mg/day isoflavones	Maltodextrin	16	CRP did not change significantly
21 Törmälä, R. 2008 Finland (53)	Healthy postmenopausal women using tibolone N=36	Age: 57.7±0.8 BMI: 24.6±5.3	Randomized, placebo-controlled, crossover	52 g/day of soy protein containing 63 mg of genistein, 43 mg of daidzein and 6 mg of glycitein, altogether 112 mg of isoflavones	Milk protein	8	CRP did not change significantly
22 van Nielen, M. 2014 Netherlands (54)	Postmenopausal women with abdominal obesity N:15	Age: 61±5 BMI: N/M	Single-blind randomized crossover trial	soy nuts (containing 30 g/d soy protein and 48 mg/d isoflavones)	Meat protein	24	CRP did not change significantly
23 Yildiz, M. F. 2005 Turkey (55)	Healthy postmenopausal women N=40	Age: 49.5±3.0 BMI: 26.9±2.3	Single blind randomized clinical trial	40 mg/day of genistein,	Nothing	24	CRP did not change significantly

†: CRP: C-reactive protein
∗: BMI: Body Mass Index
‡: N/M: Not mention
Δ: RCT: Randomized clinical trial
Φ: means (95% confidence interval)