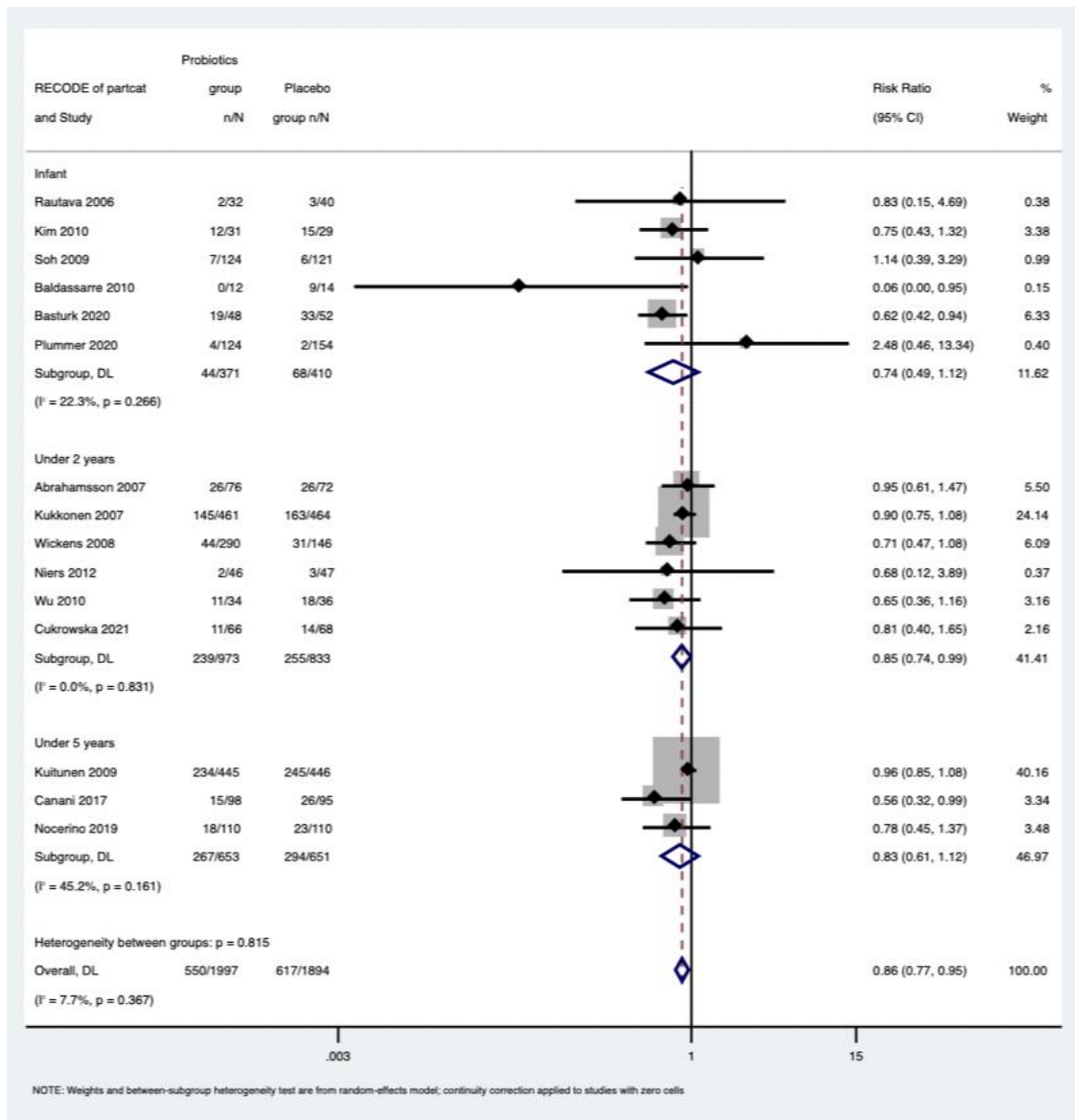
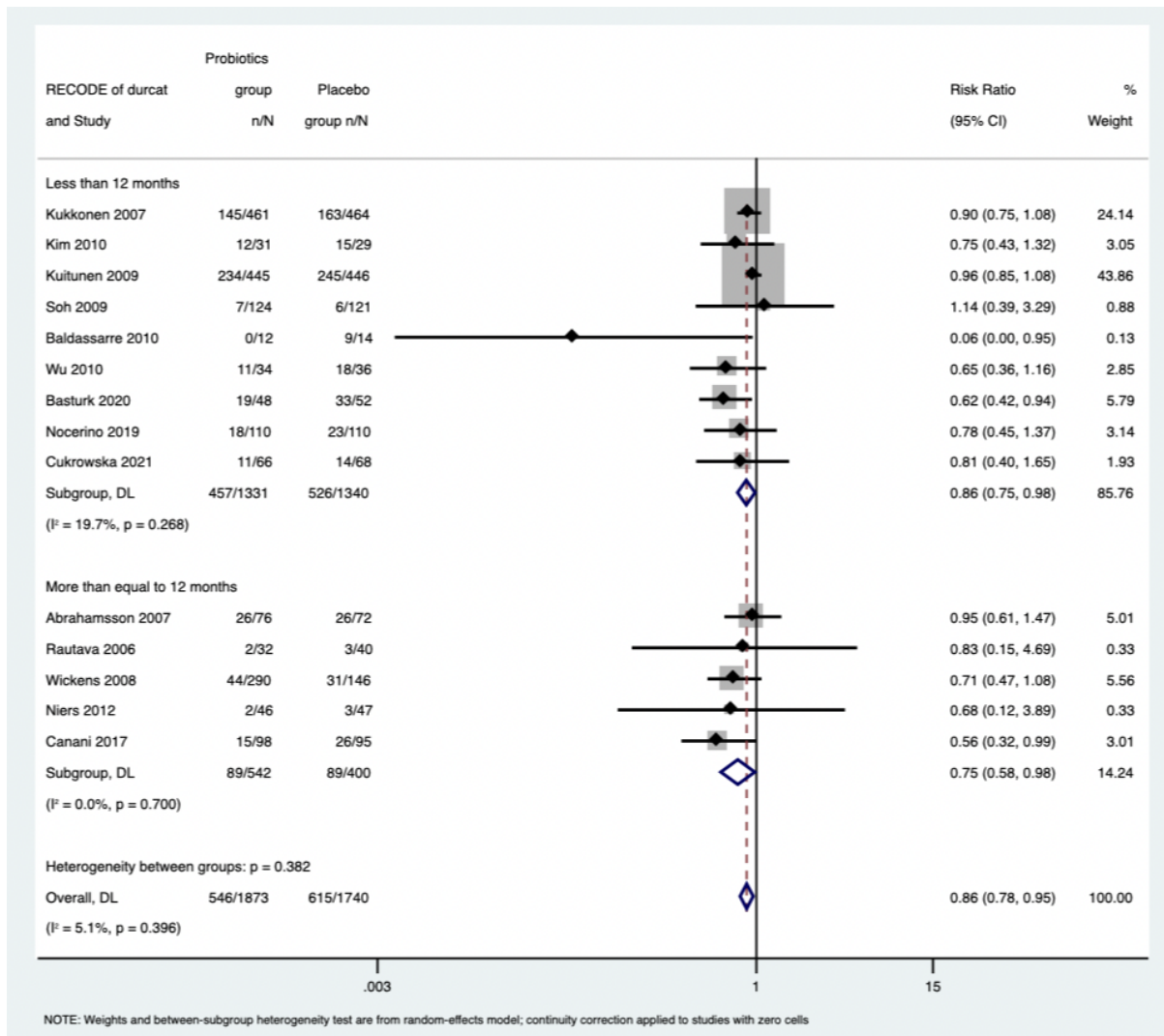


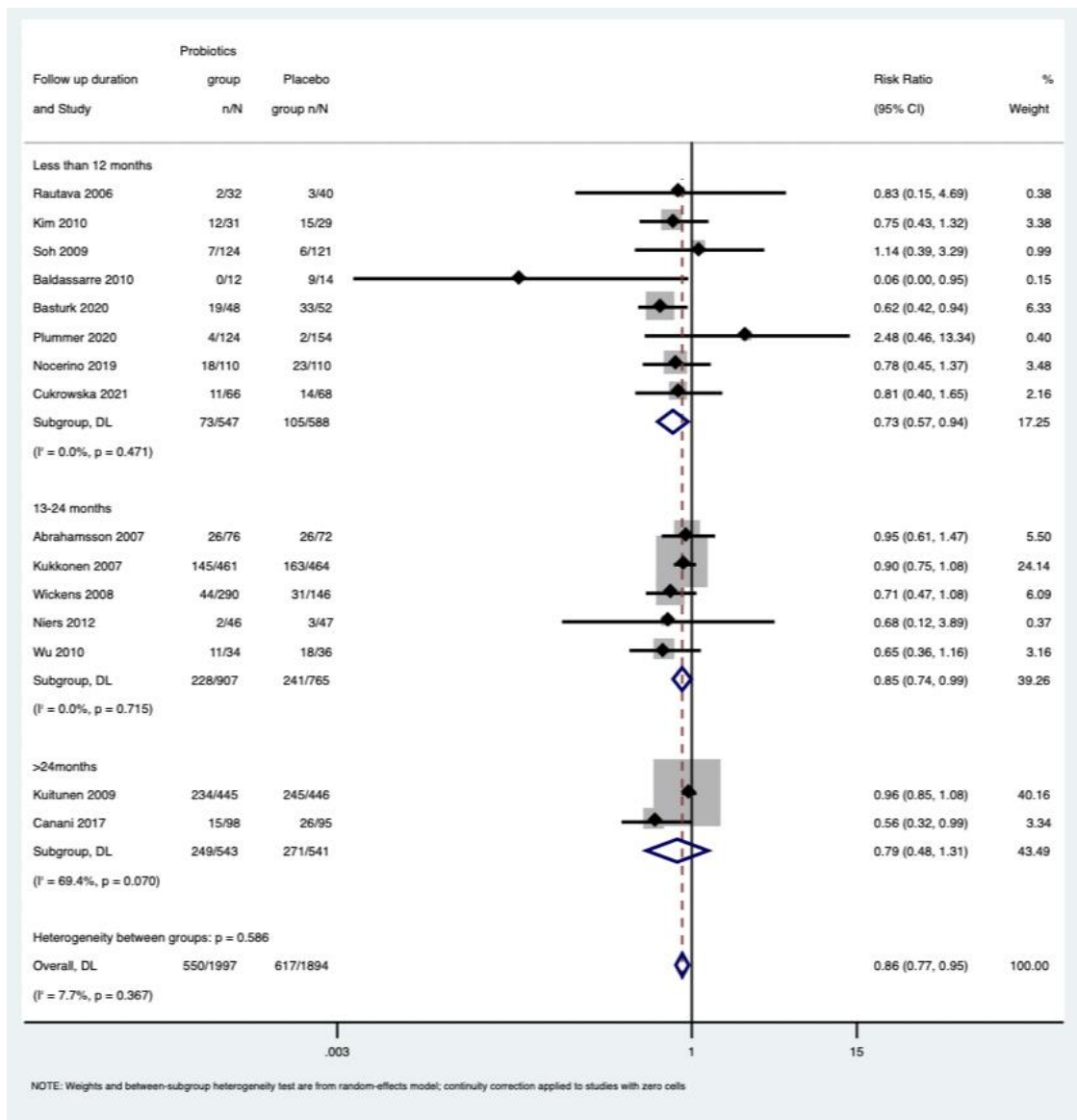
**Supplementary Figure 1: Subgroup analysis of the effectiveness of probiotics in preventing food allergies, grouped based on the type of study participants**



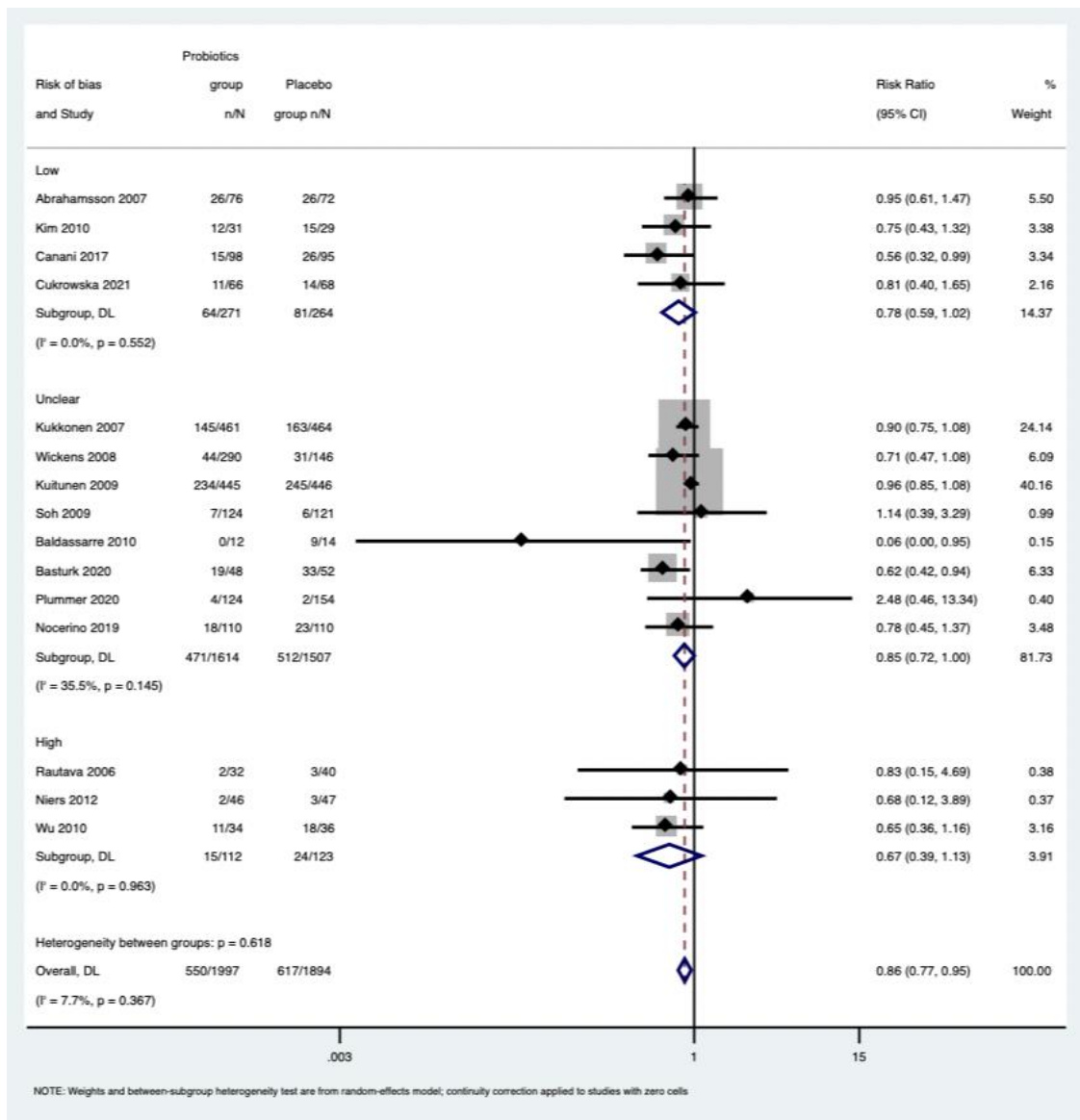
**Supplementary Figure 2: Subgroup analysis of the effectiveness of probiotics in preventing food allergies, grouped based on the duration of probiotic use**



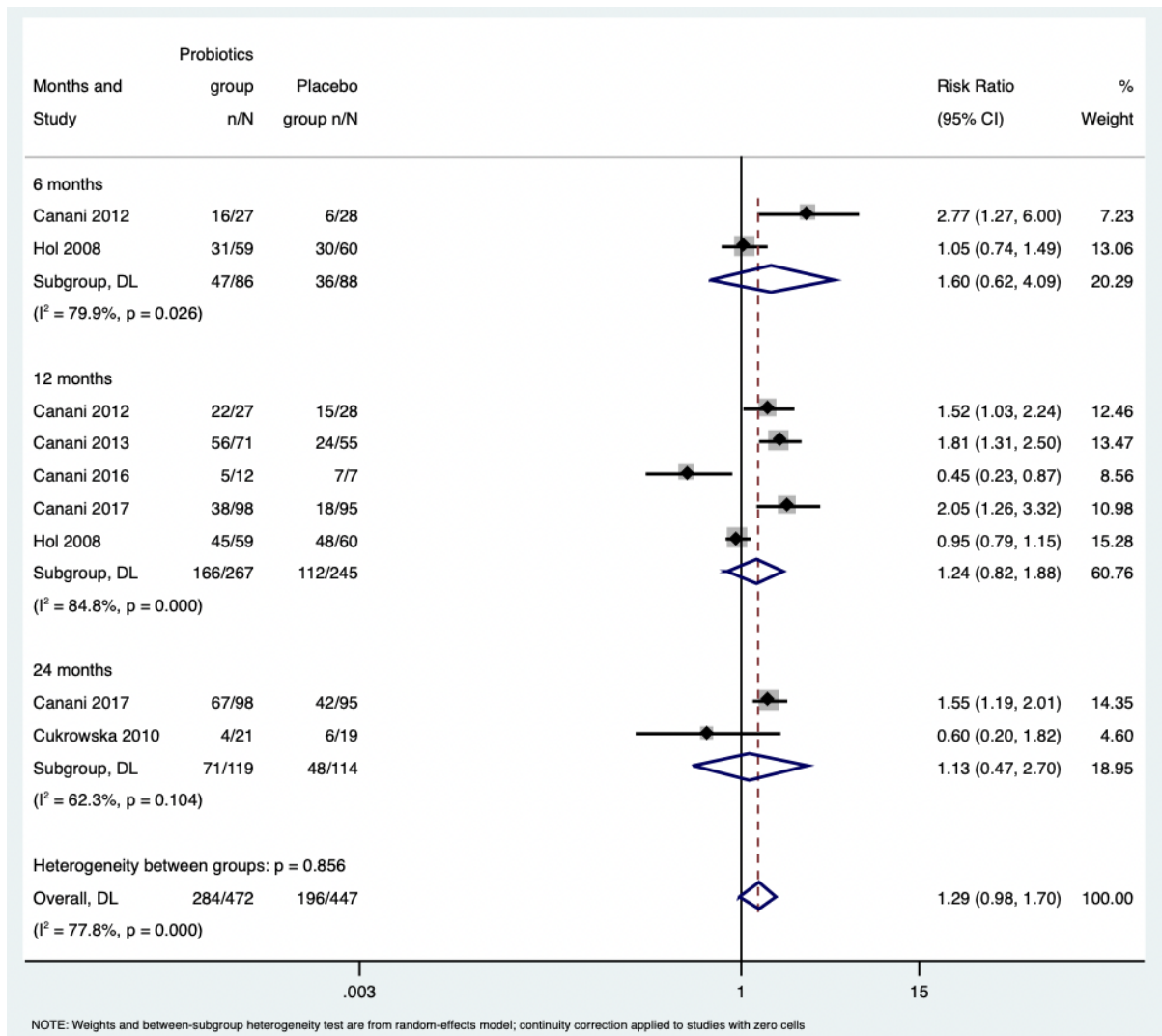
**Supplementary Figure 3: Subgroup analysis of the effectiveness of probiotics in preventing food allergies, grouped based on follow-up duration**



**Supplementary Figure 4: Subgroup analysis of the effectiveness of probiotics in preventing food allergies, grouped based on the risk of bias**



**Supplementary Figure 5: Subgroup analysis of duration of development of tolerance among the study participants**



## Supplementary Figure 6: Search strategies for objectives 1 and 2

### Objective 1:

((("food hypersensitivity"[MeSH Terms] OR ("food"[All Fields] AND "hypersensitivity"[All Fields]) OR "food hypersensitivity"[All Fields] OR ("food"[All Fields] AND "allergy"[All Fields]) OR "food allergy"[All Fields]) AND ("probiotic s"[All Fields] OR "probiotal"[All Fields] OR "probiotics"[MeSH Terms] OR "probiotics"[All Fields] OR "probiotic"[All Fields])) OR ("food hypersensitivity"[MeSH Terms] OR ("food"[All Fields] AND "hypersensitivity"[All Fields]) OR "food hypersensitivity"[All Fields]) OR (("food"[MeSH Terms] OR "food"[All Fields]) AND ("anaphylaxis"[MeSH Terms] OR "anaphylaxis"[All Fields]))) AND (("random allocation"[MeSH Terms] OR ("random"[All Fields] AND "allocation"[All Fields]) OR "random allocation"[All Fields] OR "random"[All Fields] OR "randomization"[All Fields] OR "randomized"[All Fields] OR "randomisation"[All Fields] OR "randomisations"[All Fields] OR "randomise"[All Fields] OR "randomised"[All Fields] OR "randomising"[All Fields] OR "randomizations"[All Fields] OR "randomize"[All Fields] OR "randomizes"[All Fields] OR "randomizing"[All Fields] OR "randomness"[All Fields] OR "randoms"[All Fields]) AND ("controlling"[All Fields] OR "controllability"[All Fields] OR "controllable"[All Fields] OR "controllably"[All Fields] OR "controller"[All Fields] OR "controller s"[All Fields] OR "controllers"[All Fields] OR "controlling"[All Fields] OR "controls"[All Fields] OR "prevention and control"[MeSH Subheading] OR ("prevention"[All Fields] AND "control"[All Fields]) OR "prevention and control"[All Fields] OR "control"[All Fields] OR "control groups"[MeSH Terms] OR ("control"[All Fields] AND "groups"[All Fields]) OR "control groups"[All Fields]) AND ("clinical trials as topic"[MeSH Terms] OR ("clinical"[All Fields] AND "trials"[All Fields] AND "topic"[All Fields]) OR "clinical trials as topic"[All Fields] OR "trial"[All Fields] OR "trial s"[All Fields] OR "trialed"[All Fields] OR "trialing"[All Fields] OR "trials"[All Fields]))) AND (randomizedcontrolledtrial[Filter])

(((((("food hypersensitivity"[MeSH Terms] OR ("milk"[All Fields] AND "hypersensitivity"[All Fields]) OR "milk hypersensitivity"[All Fields] OR ("milk"[All Fields] AND "allergy"[All Fields]) OR "milk allergy"[All Fields]) AND ("probiotic s"[All Fields] OR "probiotal"[All Fields] OR "probiotics"[MeSH Terms] OR "probiotics"[All Fields] OR "probiotic"[All Fields])) OR ("milk hypersensitivity"[MeSH Terms] OR ("milk"[All Fields] AND "hypersensitivity"[All Fields]) OR "milk hypersensitivity"[All Fields]) OR (("milk"[MeSH Terms] OR "milk"[All Fields]) AND ("anaphylaxis"[MeSH Terms] OR "anaphylaxis"[All Fields]))) AND (("random allocation"[MeSH Terms] OR ("random"[All Fields] AND "allocation"[All Fields]) OR "random allocation"[All Fields] OR "random"[All Fields] OR "randomization"[All Fields] OR "randomized"[All Fields] OR "randomisation"[All Fields] OR "randomisations"[All Fields] OR "randomise"[All Fields] OR "randomised"[All Fields] OR "randomising"[All Fields] OR "randomizations"[All Fields] OR "randomize"[All Fields] OR "randomizes"[All Fields] OR "randomizing"[All Fields] OR "randomness"[All Fields] OR "randoms"[All Fields]) AND ("controlling"[All Fields] OR "controllability"[All Fields] OR "controllable"[All Fields] OR "controllably"[All Fields] OR "controller"[All Fields] OR "controller s"[All Fields] OR "controllers"[All Fields] OR "controlling"[All Fields] OR "controls"[All Fields] OR "prevention and control"[MeSH Subheading] OR ("prevention"[All Fields] AND "control"[All Fields]) OR "prevention and control"[All Fields] OR "control"[All Fields] OR "control groups"[MeSH Terms] OR ("control"[All Fields] AND "groups"[All Fields]) OR "control groups"[All Fields]) AND ("clinical trials as topic"[MeSH Terms] OR ("clinical"[All Fields] AND "trials"[All Fields] AND "topic"[All Fields]) OR "clinical trials as topic"[All Fields] OR "trial"[All Fields] OR "trial s"[All Fields] OR "trialed"[All Fields] OR "trialing"[All Fields] OR "trials"[All Fields]))) AND (randomizedcontrolledtrial[Filter])

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## **Objective 2:**

((("food hypersensitivity"[MeSH Terms] OR ("food"[All Fields] AND "hypersensitivity"[All Fields]) OR "food hypersensitivity"[All Fields] OR ("food"[All Fields] AND "allergy"[All Fields]) OR "food allergy"[All Fields]) AND ("probiotic s"[All Fields] OR "probiotical"[All Fields] OR "probiotics"[MeSH Terms] OR "probiotics"[All Fields] OR "probiotic"[All Fields])) OR ("food hypersensitivity"[MeSH Terms] OR ("food"[All Fields] AND "hypersensitivity"[All Fields]) OR "food hypersensitivity"[All Fields]) OR (("food"[MeSH Terms] OR "food"[All Fields]) AND ("anaphylaxis"[MeSH Terms] OR "anaphylaxis"[All Fields]))) AND (("random allocation"[MeSH Terms] OR ("random"[All Fields] AND "allocation"[All Fields]) OR "random allocation"[All Fields] OR "random"[All Fields] OR "randomization"[All Fields] OR "randomized"[All Fields] OR "randomisation"[All Fields] OR "randomisations"[All Fields] OR "randomise"[All Fields] OR "randomised"[All Fields] OR "randomising"[All Fields] OR "randomizations"[All Fields] OR "randomize"[All Fields] OR "randomizes"[All Fields] OR "randomizing"[All Fields] OR "randomness"[All Fields] OR "randoms"[All Fields]) AND ("controlling"[All Fields] OR "controllability"[All Fields] OR "controllable"[All Fields] OR "controllably"[All Fields] OR "controller"[All Fields] OR "controller s"[All Fields] OR "controllers"[All Fields] OR "controlling"[All Fields] OR "controls"[All Fields] OR "prevention and control"[MeSH Subheading] OR ("prevention"[All Fields] AND "control"[All Fields]) OR "prevention and control"[All Fields] OR "control"[All Fields] OR "control groups"[MeSH Terms] OR ("control"[All Fields] AND "groups"[All Fields]) OR "control groups"[All Fields]) AND ("clinical trials as topic"[MeSH Terms] OR ("clinical"[All Fields] AND "trials"[All Fields] AND "topic"[All Fields]) OR "clinical trials as topic"[All Fields] OR "trial"[All Fields] OR "trial s"[All Fields] OR "trialed"[All Fields] OR "trialing"[All Fields] OR "trials"[All Fields])) AND "randomized controlled trial"[Publication Type] AND "randomized controlled trial"[Publication Type] AND ("immune tolerance"[MeSH Terms] OR ("immune"[All Fields] AND "tolerance"[All Fields]) OR "immune tolerance"[All Fields] OR "tolerance"[All Fields] OR "drug tolerance"[MeSH Terms] OR ("drug"[All Fields] AND "tolerance"[All Fields]) OR "drug tolerance"[All Fields] OR "tolerabilities"[All Fields] OR "tolerability"[All Fields] OR "tolerable"[All Fields] OR "tolerableness"[All Fields] OR "tolerably"[All Fields] OR "tolerances"[All Fields] OR "tolerant"[All Fields] OR "tolerants"[All Fields] OR "tolerate"[All Fields] OR "tolerated"[All Fields] OR "tolerates"[All Fields] OR "tolerating"[All Fields] OR "toleration"[All Fields] OR "tolerator"[All Fields] OR "tolerators"[All Fields] OR "tolerence"[All Fields])) AND (randomizedcontrolledtrial[Filter]))

PubMed Search: Objective 1 (303+35) | Objective 2 (83+33) | Objective 1 AND 2: 104

Science Direct: (as of today)

(((food allergy) AND (probiotics)) AND (randomised control trials)): 92

(((milk allergy) AND (probiotics)) AND (randomised control trials)): 63

(((tolerance) AND (probiotics)) AND (randomised control trials)): 104

(((tolerance) AND (food allergy) AND (milk allergy) OR (probiotics)) AND (randomised control trials)): 210