

### **PubMed Search Strategy**

("fatty acids, volatile"[MeSH Terms] OR "volatile fatty acids"[All Fields] OR "volatile fatty acid"[All Fields] OR "short chain fatty acids"[All Fields] OR "short chain fatty acid"[All Fields] OR "SCFA"[All Fields] OR "SCFAs"[All Fields] OR "Formic acid"[All Fields] OR "Formic acids"[All Fields] OR "Methanoic acid"[All Fields] OR "Methanoic acids"[All Fields] OR "Acetic acid"[All Fields] OR "Acetic acids"[All Fields] OR "Ethanoic acid"[All Fields] OR "Ethanoic acids"[All Fields] OR "Propionic acid"[All Fields] OR "Propionic acids"[All Fields] OR "Propanoic acid"[All Fields] OR "Propanoic acids"[All Fields] OR "Butyric acid"[All Fields] OR "Butyric acids"[All Fields] OR "Butanoic acid"[All Fields] OR "Butanoic acids"[All Fields] OR "Isobutyric acid"[All Fields] OR "Isobutyric acids"[All Fields] OR "Iso-butyric acid"[All Fields] OR "Iso-butyric acids"[All Fields] OR "2-Methylpropanoic acid"[All Fields] OR "2-Methylpropanoic acids"[All Fields] OR "Valeric acid"[All Fields] OR "Valeric acids"[All Fields] OR "Pentanoic acid"[All Fields] OR "Pentanoic acids"[All Fields] OR "Isovaleric acid"[All Fields] OR "Isovaleric acids"[All Fields] OR "Iso-valeric acid"[All Fields] OR "Iso-valeric acids"[All Fields] OR "3-Methylbutanoic acid"[All Fields] OR "3-Methylbutanoic acids"[All Fields] OR "formate"[All Fields] OR "acetate"[All Fields] OR "propionate"[All Fields] OR "butyrate"[All Fields] OR "isobutyrate"[All Fields] OR "iso-butyrate"[All Fields] OR "valerate"[All Fields] OR "isovalerate"[All Fields] OR "iso-valerate"[All Fields]) AND ("Irritable Bowel Syndrome"[Mesh] OR "Irritable Bowel Syndrome"[All Fields] OR "IBS"[All Fields])

### **Embase Search Strategy**

('short chain fatty acid')/syn OR 'short chain fatty acid\*':ti,ab OR 'SCFA\*':ti,ab OR 'Formic acid\*':ti,ab OR 'Methanoic acid\*':ti,ab OR 'Acetic acid\*':ti,ab OR 'Ethanoic acid\*':ti,ab OR 'Propionic acid\*':ti,ab OR 'Propanoic acid\*':ti,ab OR 'Butyric acid\*':ti,ab OR 'Butanoic acid\*':ti,ab OR 'Isobutyric acid\*':ti,ab OR 'Iso-butyric acid\*':ti,ab OR '2-Methylpropanoic acid\*':ti,ab OR 'Valeric acid\*':ti,ab OR 'Pentanoic acid\*':ti,ab OR 'Isovaleric acid\*':ti,ab OR 'Iso-valeric acid\*':ti,ab OR '3-Methylbutanoic acid\*':ti,ab) AND ('irritable colon')/syn OR 'Irritable Bowel Syndrome':ti,ab OR 'IBS':ti,ab)

### **Web of Science Search Strategy**

((TS=("volatile fatty acid\*" OR "short chain fatty acid\*" OR SCFA) OR TI=("volatile fatty acid\*" OR "short chain fatty acid\*" OR SCFA)) AND (TS=("irritable bowel syndrome" OR IBS) OR TI=("irritable bowel syndrome" OR IBS))) AND LANGUAGE: (English) AND DOCUMENT TYPES: (Article)