**Identification of studies via databases and registers**

Records identified from

Databases\*

(n = 695)

**Identification**

Records screened

(n = 695)

Records excluded lacking comparision of VitD3 and 25(OH)D3 (n = 655)

**Screening**

Reports excluded:

No dietary composition (n = 3)

Duplicate (n = 2)

Reports assessed for eligibility after proper evaluation

(n = 40)

Studies included in review (n = 35)

Reports of included studies (n = 35)

**Included**

**Source of flow diagram**: Prisma 2020 statement

\*Web of Science, PubMed; the following search terms were used:

**Web of Science**

* (Vitamin D) AND (Growth OR Immunity) AND (Pig\* OR Sow\* OR Piglet\* OR Boar\* OR Swine\*) (Topic)
  + Hits: 454
  + Searched on: 23.05.2022

**PubMed**

* (Vitamin D) AND (Growth OR Immunity) AND (Pig OR Sow OR Piglet OR Boar OR Swine)
  + Hits: 169
  + Searched on: 01.06.2022
* ("Vitamin D"[Mesh]) AND ( "Swine/growth AND development"[Mesh] OR "Swine/immunology"[Mesh] )
  + Hits: 26
  + Searched on: 02.06.2022
* (( "Swine/growth and development"[Mesh] OR "Swine/immunology"[Mesh] )) AND "Cholecalciferol"[Mesh]
  + Hits: 18
  + Searched on: 02.06.2022
* ("Vitamin D"[Mesh]) AND "Swine/growth AND development"[Mesh]
  + Hits: 23
  + Searched on 02.06.2022
* ("Vitamin D"[Mesh]) AND "Swine/immunology"[Mesh]
  + Hits: 5
  + Searched on: 02.06.2022