

SUPPLEMENTARY MATERIAL

Original Hourihane's severity scoring (HSS) [2]

	> 100 mg	3-99 mg	< 3 mg	Mucosal touch	Inhalation/skin contact only
Localized urticaria/pruritus	1	2	3	4	6
Generalized urticaria	5	7	8	10	12
Abdominal pain/vomiting/angioedema	9	11	13	16	18
Laryngeal edema/mild wheezing	14	15	17	19	20
Collapse/severe respiratory symptoms	21	22	23	24	25

The smallest dose of unheated, defatted cow's milk given in our study protocol [5] was 15mg. This means the last three columns in HSS [2] were not used for severity scoring in our study. The severity score of a reaction with HSS [2] was based both on the symptoms and the cumulative eliciting dose. Scores 1-5 were considered mild, scores 6-13 as moderate and scores 14-25 as severe. Only the most severe symptom resulting in the highest score was used for scoring.

Modified Hourihane's severity scoring by Kukkonen et al. (mHSS) [7]

	> 100 mg	6-99 mg	≤ 5 mg
Localized urticaria <5 lesions on face/extremities or pruritus	1	2	3
Mild stomach pain <30min and resolves without medication	3	4	5
Generalized urticaria	6	7	8
Abdominal pain >30min vomiting, lethargy, diarrhea, angioedema	9	11	13
Laryngeal edema or mild wheezing; hoarseness of voice, stridor, cough, mild wheezing, pain in the throat	14	15	17
Severe respiratory symptoms or a collapse: drop in the blood pressure, severe bronchial obstruction, oxygen saturation <92%, pallor, collapse	21	22	23

The smallest dose of unheated, defatted cow's milk given in our study protocol [5] was 15mg. Thus, the last column in mHSS [7] was not used for severity scoring in our study. Scores 1-5 were considered mild, scores 6-13 as moderate and scores 14-25 as severe. Only the most severe symptom resulting in the highest score was used for scoring.

Modifications mHSS [7] made to HSS [2]:

- Localized urticaria was defined as <5 lesions on face/extremities or pruritus
 - o HSS [2] did not define what was considered as localized urticaria
- Abdominal pain was further divided into mild and moderate
 - o HSS [2] only had one category for abdominal pain
- Severity of generalized urticaria was emphasized as generalized urticaria was considered moderate at all cumulative doses
 - o In HSS [2] severity of generalized urticaria depended on the cumulative eliciting dose (mild if >100mg, otherwise moderate)
- Lethargy and diarrhea were added as recognized symptoms in the same category with vomiting
- Respiratory symptoms were described in more detail: hoarseness of voice, stridor, cough, mild wheezing, pain in the throat, which better standardizes their assessment between clinicians
 - o Originally described in HSS [2] as laryngeal edema/mild wheezing
 - o mHSS [7] did not differentiate persistent cough from non-persistent cough
- Severe respiratory symptoms and collapse were defined in more detail: pallor, drop in arterial blood saturation <92%, severe bronchial obstruction, drop in blood pressure
 - o Originally described in HSS [2] as collapse or severe respiratory symptoms
- Upper respiratory symptoms remained unrecognized also in mHSS [7]