Table S1. Distribution of parameters using Monte Carlo simulation.

Parameter			Unit	Distribution (fitted parameters)
Occurrence	DON group	Raw	μg/kg	Weibull
		Simple	μg/kg	Log-normal
		Fermented	μg/kg	Log-normal
		Total	μg/kg	Log-normal
	NIV group	Raw	μg/kg	Gamma, Log-normal
		Simple	μg/kg	Student's *t*, Logistic
		Fermented	μg/kg	Log-normal
		Total	μg/kg	Log-normal
Consumption	Raw	Infant	g/day	Log-normal
		Adult	g/day	Log-normal
		All ages	g/day	Log-normal
	Simple	Infant	g/day	Log-normal
		Adult	g/day	Log-normal
		All ages	g/day	Log-normal
	Fermented	Infant	g/day	Log-normal
		Adult	g/day	Log-normal
		All ages	g/day	Log-normal
	Total	Infant	g/day	Log-normal
		Adult	g/day	Log-normal
		All ages	g/day	Log-normal
bw	Infant		kg	Log-normal
	Adult		kg	Gamma
	All ages		kg	Log-normal
TDI	DON group		μg/kg bw/day	Fixed value 1.0 [7]
	NIV group		μg/kg bw/day	Fixed value 0.4 (this study)

DON, deoxynivalenol; NIV, nivalenol; bw; body weight TDI, tolerable daily intake.

Table S2. Summary of main toxicological studies for immunotoxicity and hemotoxicity of nivalenol (NIV).

Species/sex	N	Duration	Dose	Endpoint	LOAEL/NOAEL	Reference
C57BL/6CrSlc SPF mice /female	2–5	6 months	0, 6, 12, 30 mg NIV/kg diet	Decrease in white blood cells	30/12	[30]
	6	1 year		Decrease in white blood cells	-/-	[31]
	10	2 years		Decrease in white blood cells	-/-	
C57B16 mice /male	10	4 weeks	0, 0.014, 0.071, 0.355, 1.774, 8.87 mg NIV/kg bw/3 times per week	Increase in serum IgG	8.87/1.774	[32]
F344/DuCrj rats /female	9–10	90 days	0, 6.25, 25, 100 mg NIV/kg diet	Decrease in white blood cells	6.25/-	[33]
				Decrease in red blood cells	-/-	
				Decrease in platelets	100/25	
				Decrease in hemoglobin	100/25	
F344/DuCrj rats /male	9–10	90 days	0, 6.25, 25, 100 mg NIV/kg diet	Decrease in white blood cells	100/25	[34] [35]
				Decrease in red blood cells	100/25	
				Decrease in platelets	100/25	
				Decrease in hemoglobin	-/-	
				Increase in serum IgM	100/25	
BALB/c mice	5–8	4–8 weeks	0, 12, 24 mg NIV/kg diet	Increase in serum IgA (4 weeks)	24/12	[36]
				Increase in serum IgA (8 weeks)	12/-	

LOAEL, lowest observed adverse effect level; NOAEL, no-observed-adverse-effect level; bw, body weight; -, not mentioned.

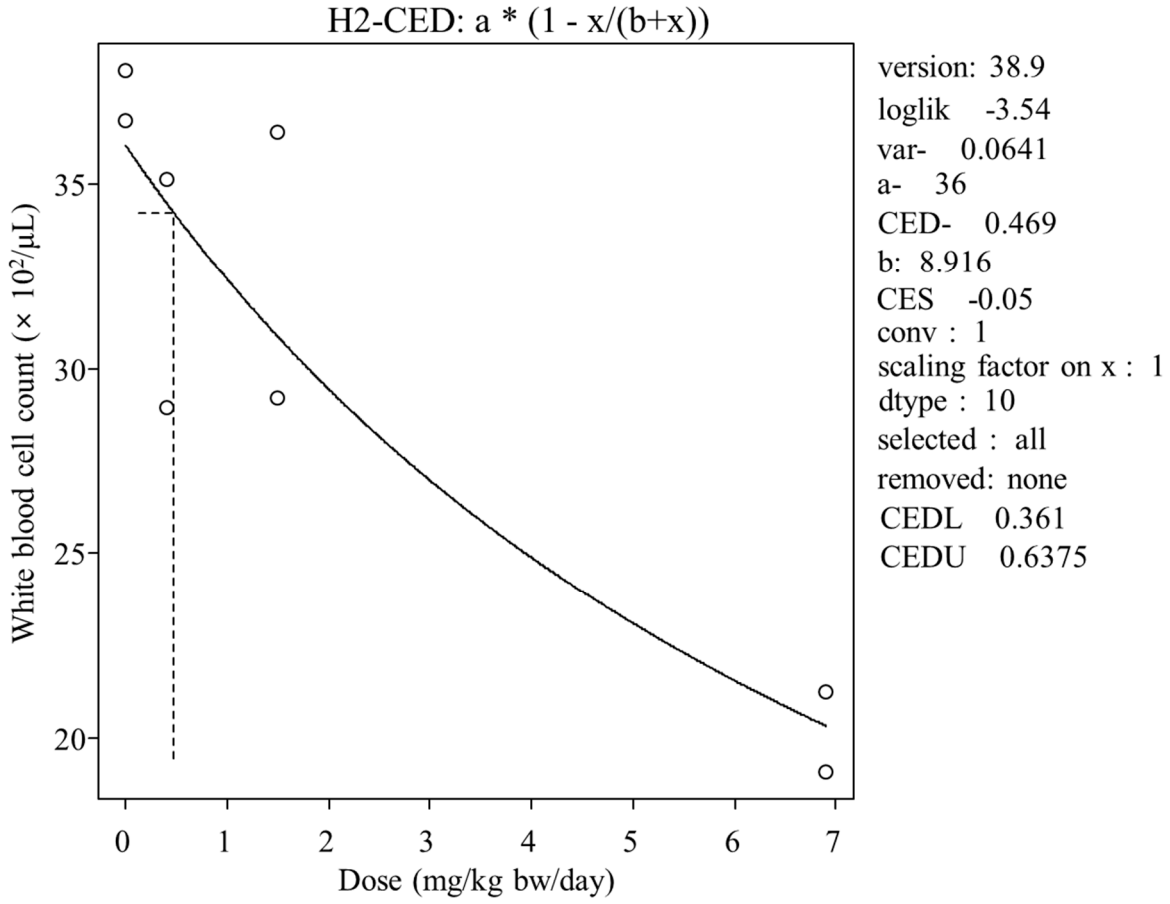

Figure S1. Dose–response modeling for white blood cell change with fitted Hill family model H2 of the 90 days subchronic study.