

Supplementary figures:

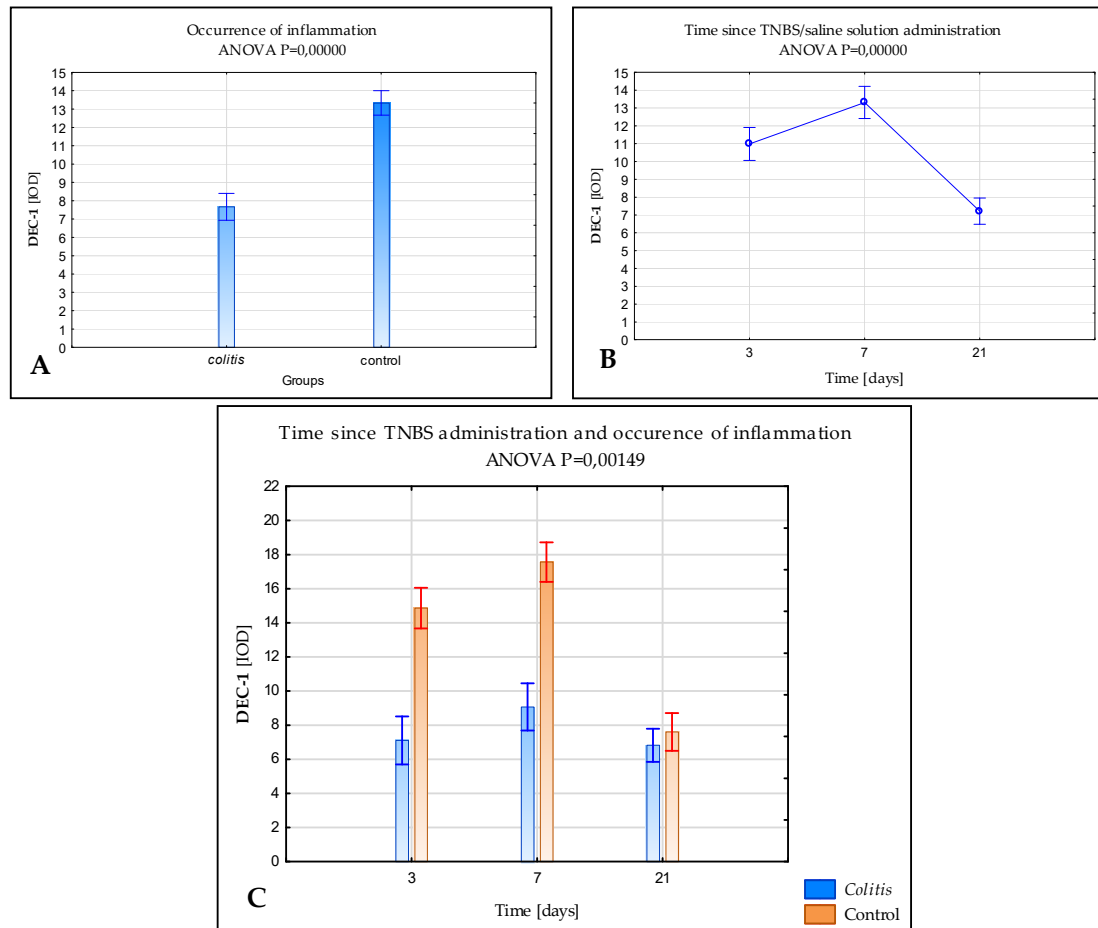


Figure S1. Changes expression **DEC-1** in colonocytes expressed (mean $\pm$ SE) as integrated optical density (IOD). ANOVA analysis. **A** – Influence of inflammation; **B** – Influence of time since TNBS/saline solution administration; **C** – Influence of interaction between the time since TNBS/saline solution administration and the occurrence of inflammation.

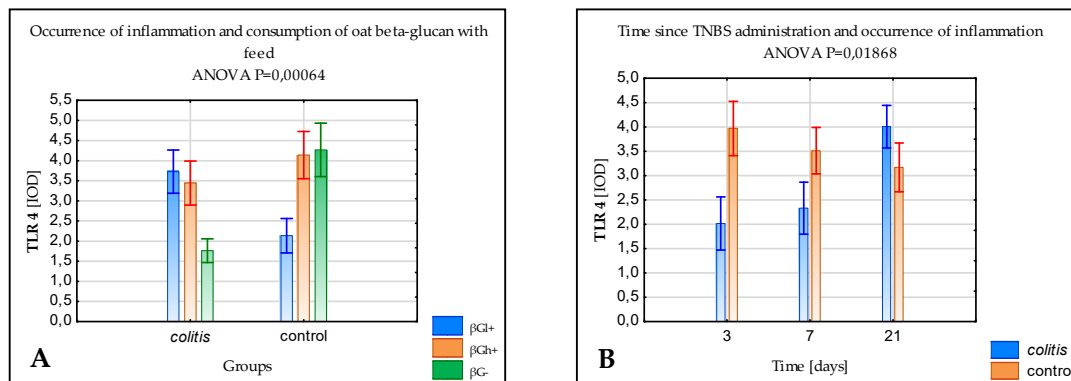


Figure S2. Changes expression **TLR 4** in colonocytes expressed (mean $\pm$ SE) as integrated optical density (IOD). ANOVA analysis. **A** – Influence of interaction between the occurrence of inflammation and consumption of oat beta-glucan with feed. **B** – Influence of interaction between the time since TNBS/saline solution administration and the occurrence of inflammation.

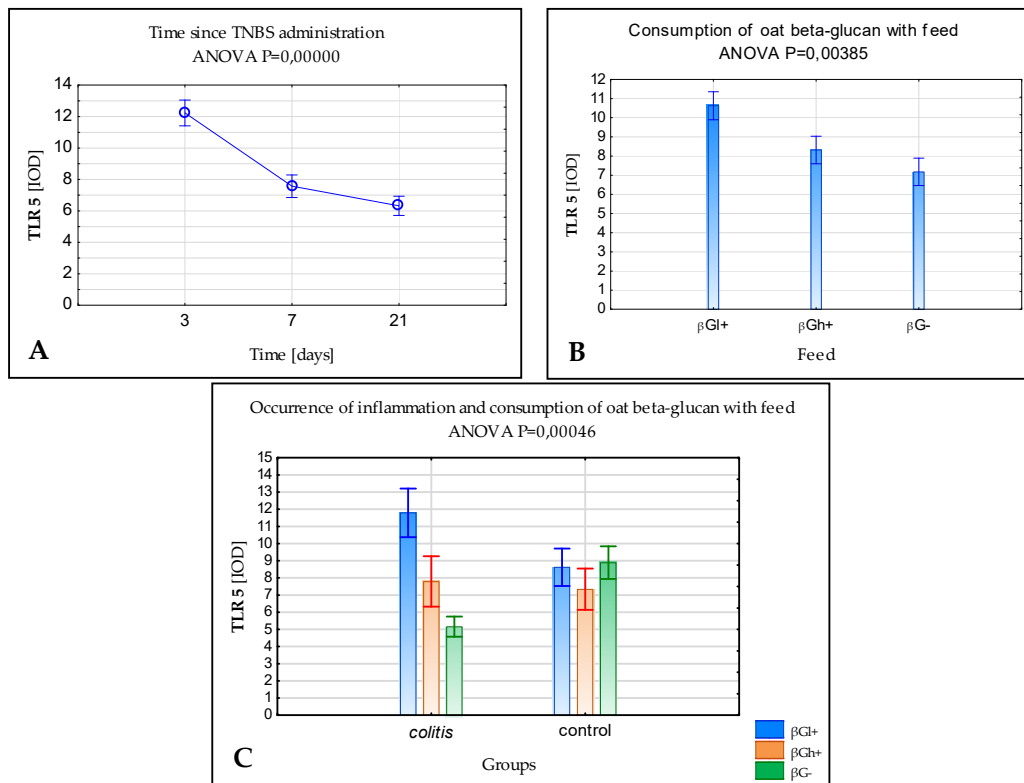


Figure S3. Changes expression **TLR 5** in colonocytes expressed (mean $\pm$ SE) as integrated optical density (IOD). ANOVA analysis. **A** – Influence of time since TNBS/saline solution administration. **B** – Influence of consumption of oat beta-glucan with feed. **C** – Influence of interaction between the occurrence of inflammation and consumption of oat beta-glucan with feed.

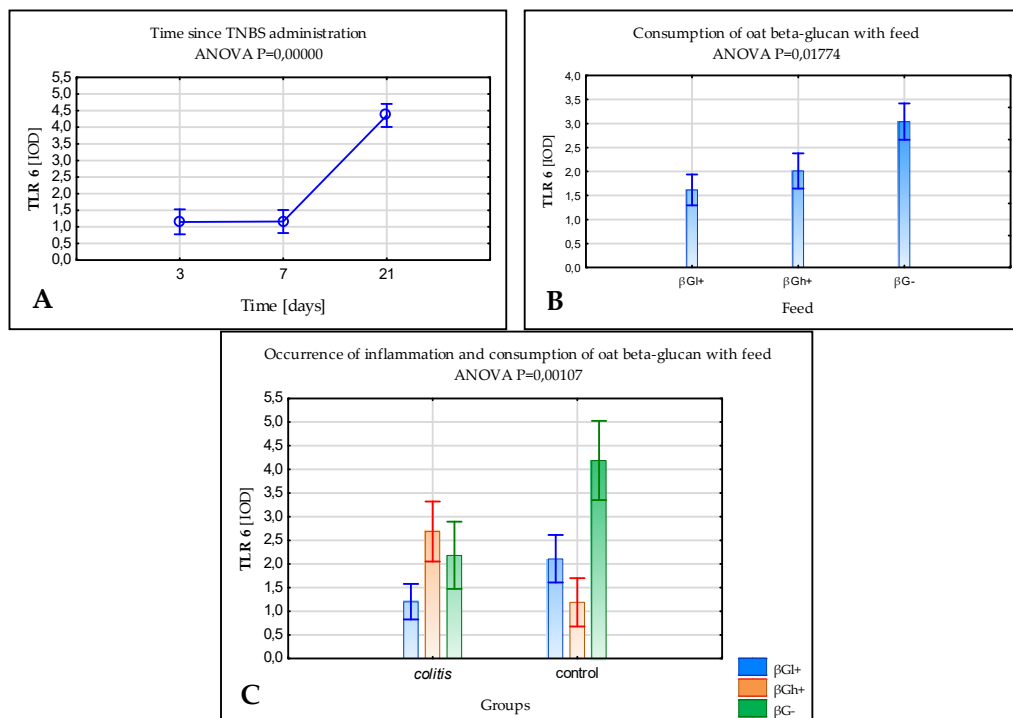


Figure S4. Changes expression **TLR 6** in colonocytes expressed (mean $\pm$ SE) as integrated optical density (IOD). ANOVA analysis. **A** – Influence of time since TNBS/saline solution administration. **B** – Influence of consumption of oat beta-glucan with feed. **C** – Influence of interaction between the occurrence of inflammation and consumption of oat beta-glucan with feed.

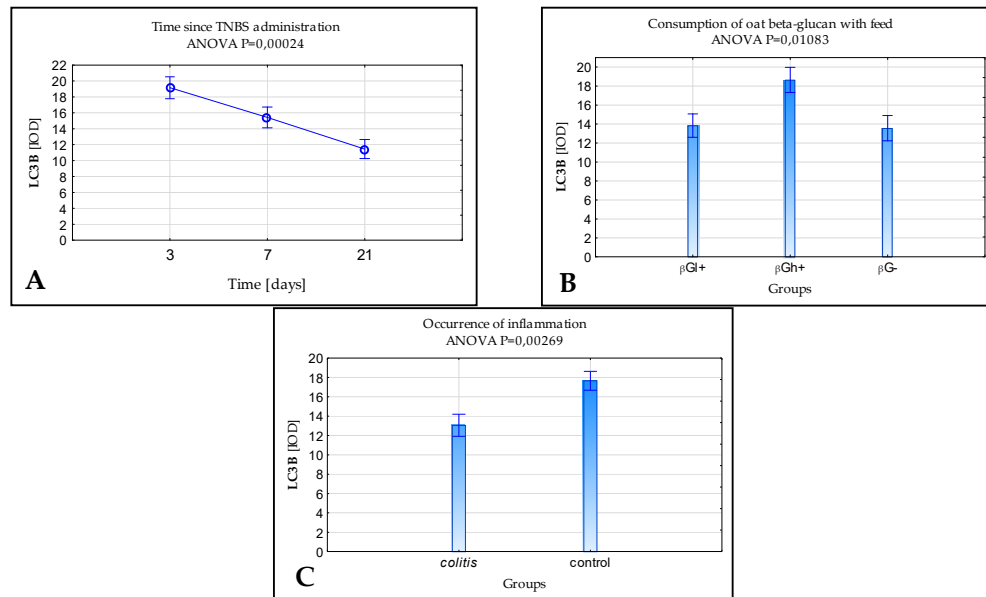


Figure S5. Changes expression **LC3B** in colonocytes expressed (mean $\pm$ SE) as integrated optical density (IOD). ANOVA analysis. **A** – Influence of time since TNBS/saline solution administration. **B** – Influence of consumption of oat beta-glucan with feed. **C** – Influence of the occurrence of inflammation.

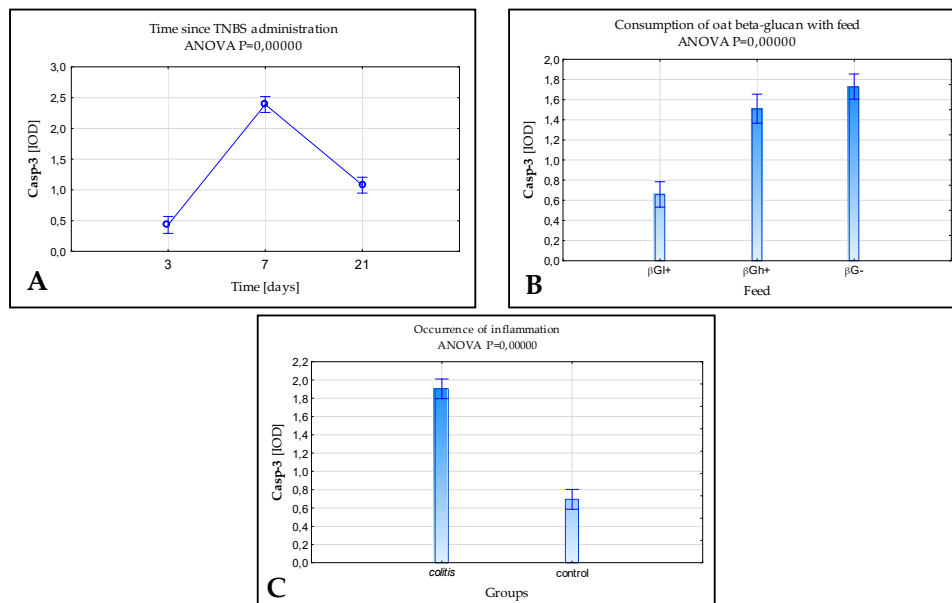


Figure S6. Changes expression **Caspase-3** in colonocytes expressed (mean $\pm$ SE) as integrated optical density (IOD). ANOVA analysis. **A** – Influence of time since TNBS/saline solution administration. **B** – Influence of consumption of oat beta-glucan with feed. **C** – Influence of the occurrence of inflammation.

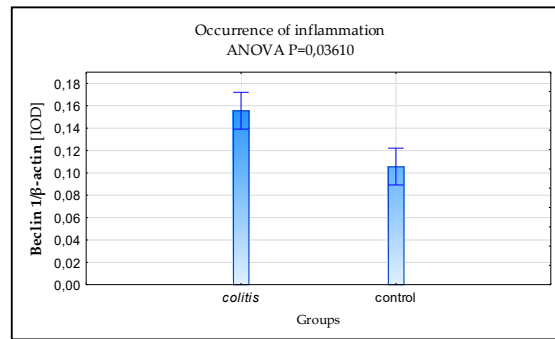


Figure S7. Results of the densitometric analysis for **Beclin 1** expression in the large intestinal wall expressed (mean ± SE) as integrated optical density (IOD). ANOVA analysis. Influence of the occurrence of inflammation.

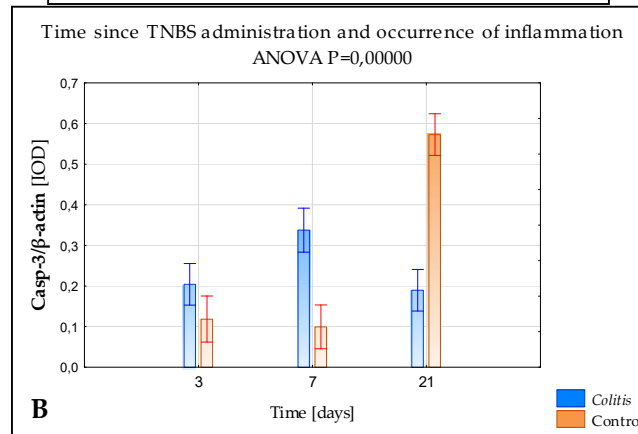
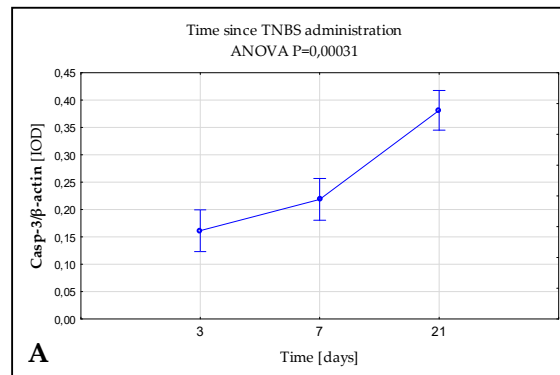


Figure S8. Results of the densitometric analysis for **Caspase-3** expression in the large intestinal wall expressed (mean ± SE) as integrated optical density (IOD). ANOVA analysis. **A** – Influence of time since TNBS/saline solution administration. **B** – Influence of interaction between the time since TNBS/saline solution administration and the occurrence of inflammation

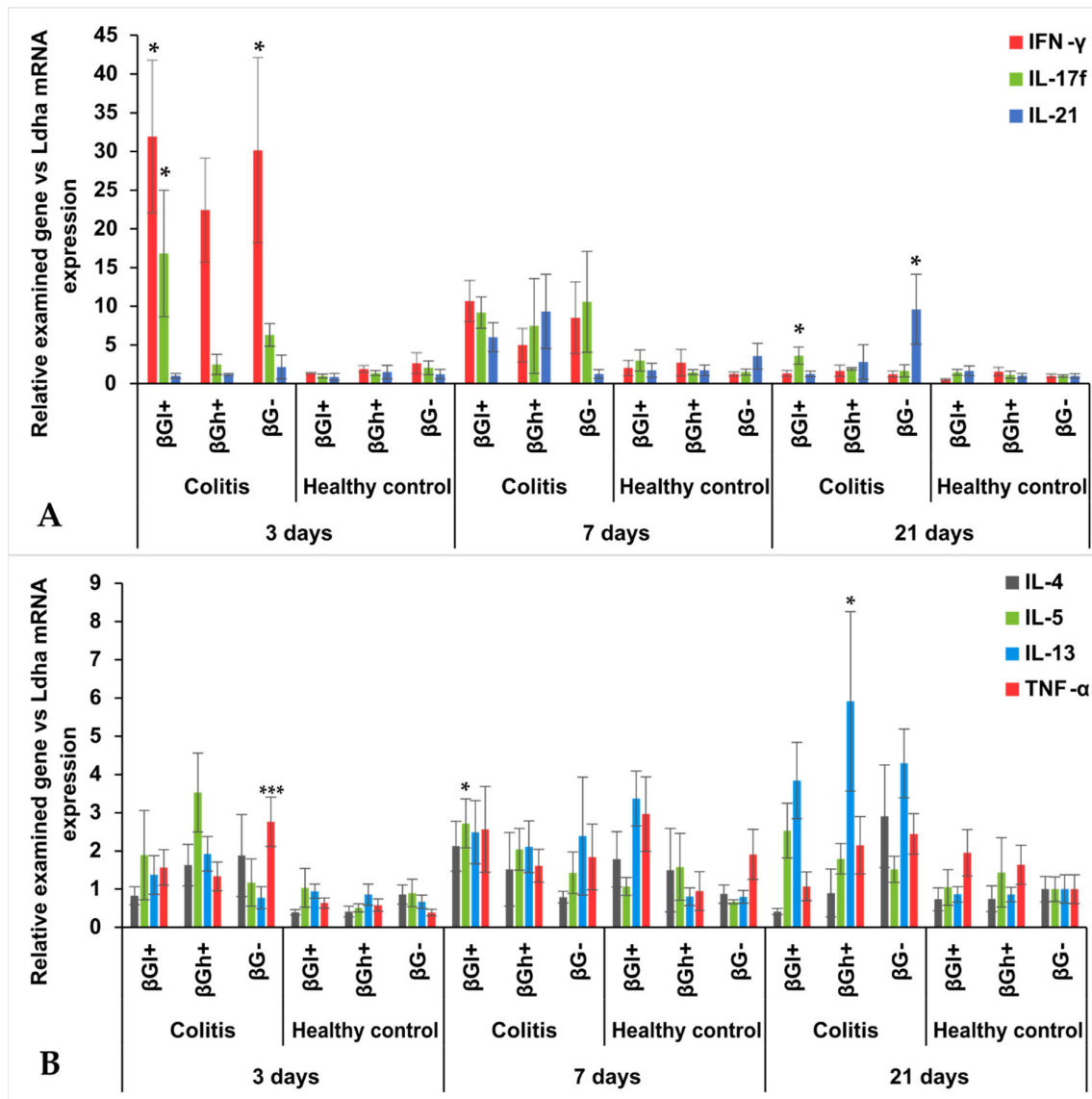


Figure S9. Relative expression of cytokine genes vs Ldha mRNA. Data presented in arbitrary units as a ratio of target gene expression to expression of the reference gene (Ldha) with 21 days control βG-group calculated as 1 (means ± SE). **A.** *Ifng*, *Il17f*, *Il21*; **B.** *Il4*, *Il5*, *Il13*, *Tnf*. *Significantly different from the control group (control βG-) at the same time point according to the Dunnett post hoc test (* $P < 0.05$, *** $P < 0.001$).