Abstract: The invention relates to novel derivatives of short-chain fatty acids, in particular derivatives of butyric acid, useful for all the known clinical applications of the latter, which show physicochemical characteristics suitable for an easy oral administration, being devoid of the unpleasant organoleptic properties that characterise butyrate. The new compounds are amide derivatives which can be synthesised by reaction of the corresponding fatty acid halide with a naturally occurring amino acid, phenylalanine or a suitable derivative thereof, and which are in a poorly hygroscopic, easily weighable form, stable to acids and alkalis and able to release the acid at the small and large bowel level in a constant manner over time. They do not have disagreeable odours and are practically tasteless, thus allowing the manufacture of preparations for oral administration also suitable for the therapy of chronic diseases and in the paediatric field.