Alimentary triacylglycerols must be degraded to fatty acids and monoacylglycerols before absorbtion by the intestinal mucosa. This breakdown is carried out by the small intestine lipases.

To make a usable buffer one should use acid or base with pK close to necessary pH values.

pH for buffers formed by weak base and its salt:

$pH = 14 - pK_b + lg [B]/[HB_+]$

To obtain pH 9.5 the ammonia buffer should be used ($pK_b = 4.75$):

$9.5 = 14 - 4.75 + lg [NH_3]/[NH_{4+}]$

$[B]/[BH_+] = 10_{0.25} = 1.78$

Therefore, we should take 1.78 moles of ammonia for each mole of ammonia salt, such as ammonia chloride.

pH for buffers formed by weak acid and its salt:

$pH = pK_a + lg [A_-]/[HA]$

To obtain pH 3.5 the racemic tartaric acid buffer should be used ($pK_{a1} = 3.22$):

$3.5 = 3.22 + lg [C_4H_5O_{6-}]/[HC_4H_5O_6]$

$[C_4H_5O_{6-}]/[HC_4H_5O_6] = 10_{0.28} = 1.91$

Therefore, we should take 1.91 moles of sodium or potassium tartrate for each mole of tartaric acid.