

Renin is an enzyme secreted into the blood from specialized cells that encircle the arterioles at the entrance to the glomeruli of the kidneys (the renal capillary networks that are the filtration units of the kidney). ACE inhibitors, which block the formation of angiotensin II, are used in treating high blood pressure (hypertension), which is produced by excessive constriction of the small arteries. The primary stimulus for increased renin secretion is decreased blood flow to the kidneys, which may be caused by loss of sodium and water (as a result of diarrhea, persistent vomiting, or excessive perspiration) or by narrowing of a renal artery.