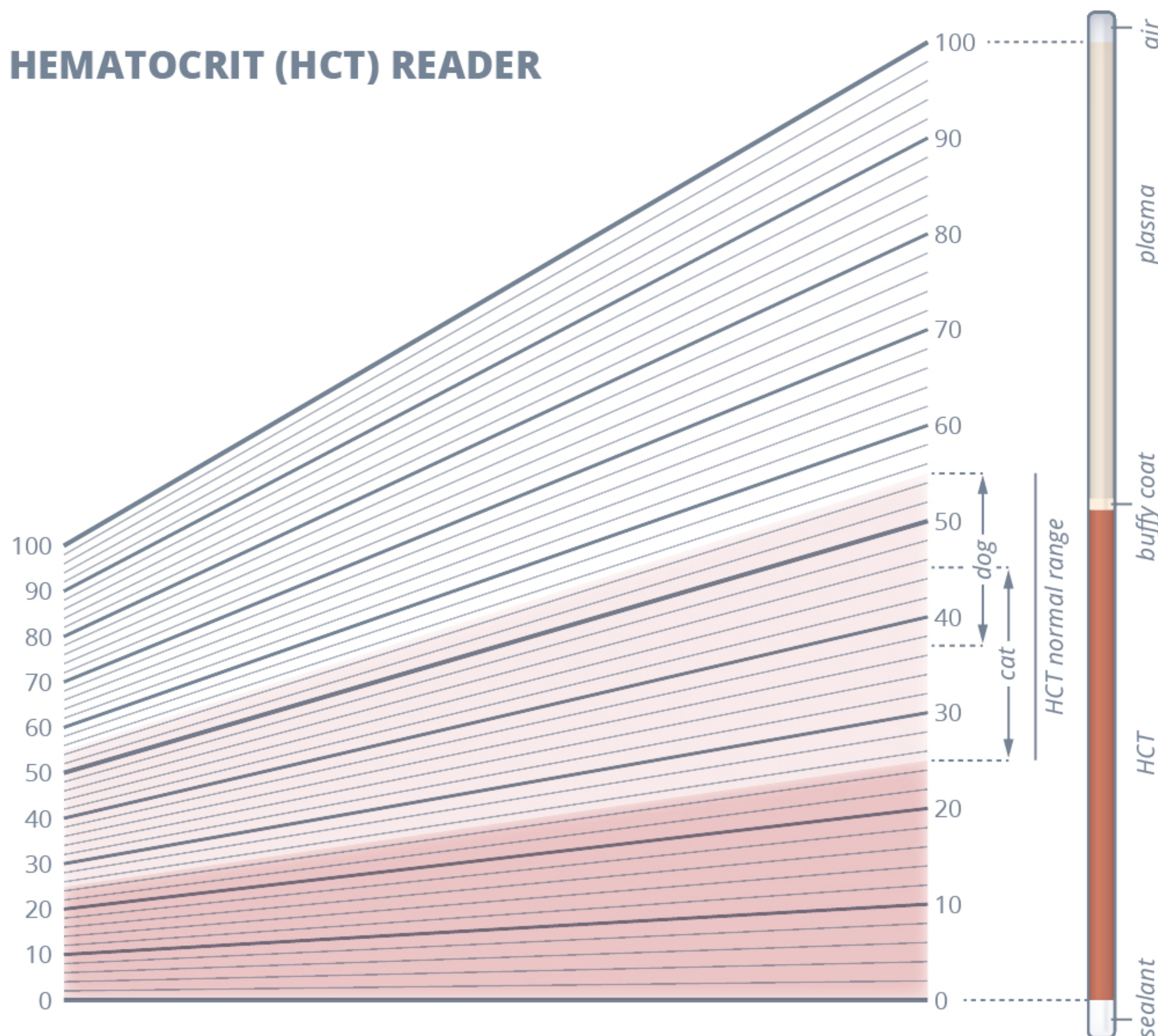


HEMATOCRIT (HCT) READER



HCT* TUBE APPEARANCE

Plasma color

- **lipemic (white)** pancreatitis, postprandial lipemia, hyperadrenocorticism, diabetes mellitus, hypothyroidism
- **hemolyzed (red)** poor collection, intravascular hemolysis
- **icteric (yellow)** pre-hepatic, hepatic, post-hepatic

Large buffy coat

- increased WBC
- bone marrow neoplasia

* HCT is equivalent to PCV but expressed as a percentage

ALTERATIONS IN PACKED CELL VOLUME (PCV) & TOTAL PROTEIN (TP)

PCV	TP	Interpretation
↑	Normal	Polycythemia (rare), splenic contraction, dehydration with hypoproteinemia [†]
↑	↑	Dehydration, acute fluid shift
↑	↓	Dehydration with hypoproteinemia [†] , hemorrhagic gastroenteritis, splenic contraction after hemorrhage
Normal	Normal	Normal hydration, acute hemorrhage before fluid shifting
Normal / ↑	↓	Hypoproteinemia [†] , splenic contraction after hemorrhage
Normal	↑	Anemia with dehydration, normal hydration with hyperproteinemia [‡] / hyperglobulinemia
↓	Normal	Chronic RBC destruction or ↓ production due to bone marrow disorders or anemia of chronic disease, hemolytic anemia (if hemolyzed or icteric plasma)
↓	↓	Hemodilution after aggressive fluid therapy, fluid resuscitation post-hemorrhage
↓	↑	Severe anemia with dehydration, ↓ RBC production due to bone marrow disorders, lymphoproliferative disease

[†] Hypoproteinemia due to protein loss (GIT, renal) / ↓ production (liver)

[‡] Hyperproteinemia due to artefacts (lipemia)