A1CARE (glycohemoglobin) test result. A baycom diagnostics veterinary use only product.
To setup a time to discuss the result(s) send a reply to this email.

A1C RESULT INTERPRETATION

A1C (glycohemoglobin) measurement is useful in diagnosing diabetes and in assessing the effectiveness of insulin therapy, owner compliance and long-term diabetes control.

A1C result of < 4 (Normal)

A1C < 4 Indicates good or normal management of blood glucose levels for the last 70 days in felines and 110 days in canines. For cats and dogs multiply your A1C result x 30 to get a conservative average glucose reading for the last 70 days in felines and 110 days in canines. For example, A1C was 4.0 then multiply 4x30 to get an average glucose reading of 120 for the last 70 days in a cat and 110 days in a dog.

> A1C TESTING IS RECOMMEND SEMIANNUALLY OR ANNUALLY as a wellness check and is recommended especially for overweight animals and breeds pre-disposed to diabetes IN DOGS: Keeshonds, Samoyeds, Terriers, Miniature Schnauzers, Dachshunds, Poodles & Cairn Terriers. IN FELINES: Older cats, Castrated Male Cats are commonly affected, A higher incidence of feline diabetes in Burmese Cats has been reported in Australia and the UK.

A1C result of 4 to 6 (Pre-diabetes for canines or "transitional diabetes" for felines)

A1C result of 4 to 6. The primary goal of prediabetes management is to normalize glucose levels through diet and exercises to prevent or delay progression to diabetes and its common prediabetes comorbidities such as obesity, hypertension, dyslipidemia, cardiovascular disease, and chronic kidney disease is essential. Pet owner compliance with an A1C result in this range can be an effective tool since it cannot be manipulated like a glucose reading can be by simply adjusting the pets diet the day before and the day of the visit to the Veterinarian. For pet owners and their pets in whom lifestyle modification fails to produce necessary improvement after 3 to 6 months, pharmacologic intervention may be appropriate and requires careful judgment regarding the risks and benefits of each specific agent for each individual pet. Monitoring prediabetics with an A1C test once a quarter is strongly encouraged.

> A1C TESTING ONCE A QUARTER to monitor progression/trend is recommended for any feline or canine with a result in the 4 to 6 range. Especially for overweight animals and breeds pre-disposed to diabetes IN DOGS: Keeshonds, Samoyeds, Terriers, Miniature Schnauzers, Dachshunds, Poodles & Cairn Terriers. IN FELINES: Older cats, Castrated Male Cats are commonly affected, A higher incidence of feline diabetes in Burmese Cats has been reported in Australia and the UK.

A1C result of 6 to 8 (Diabetic for canines and transitional/diabetic diabetes for felines)

CANINE A1C result of greater 6 suggests the need for active management of diabetes via diet, exercise and insulin. AAHA is a resource for the types of insulin, dosages and general guidelines. For cats and dogs multiply your A1C result x 30 to get a conservative average glucose reading for the last 70 days in felines and 110 days in canines. For example, A1C was 8.0 then multiply 8x30 to get an average glucose reading of 240 for the last 70 days in a cat and 110 days in a dog. Veterinary consensus for Canine treatment is to increase insulin dosage by 1 unit with the appropriate blood glucose monitoring at home and administering another A1C test in approximately 110 days to RE-assess the A1C level. Veterinarian consensus suggests active management via diet, exercise and insulin treatment can bring canine A1C values down into the 4 to 6 range.

FELINE A1C result of greater than 6 to 8 suggests the need for active management of diabetes via diet, exercise and insulin. AAHA is a preferred resource for the types of insulin, dosages and general guidelines. Multiply your A1C result x 30 to get a conservative average glucose reading for the last 70 days in felines and 110 days in canines. For example, A1C was 8.0 then multiply 8x30 to get an average glucose reading of 240 for the last 70 days in a cat and 110 days in a dog. Veterinary consensus for Feline treatment is to increase insulin dosage by 1 unit with the appropriate blood glucose monitoring at home and administering another A1C test in 70 days to assess A1C levels. Due to the difficulties in treating Felines via at-home exercise, diet and insulin regulating a Feline A1C down to 6 is attainable/desirable.

> A1C TESTING ONCE A QUARTER to monitor progression or remission is recommended for any feline or canine with a result in the 6 to 8 range.

A1C result of 8 to 12 (Diabetic for canines and diabetic/transitional for felines)

CANINE A1C result of 8 to 12 suggests the need for increased active management of diabetes via diet, exercise and insulin. For cats and dogs multiply your A1C result x 30 to get a conservative average glucose reading for the last 70 days in felines and 110 days in canines. For example, A1C was 12.0 then multiply 12x30 to get an average glucose reading of 360 for the last 70 days in a cat and 110 days in a dog. AAHA is a preferred resource for the types of insulin, dosages and general guidelines. Veterinary consensus for Canine treatment is to increase insulin dosage by 1 unit with the appropriate blood glucose monitoring at home and administering another A1C test in approximately 110 days to RE-assess the A1C level. Due to the similarities of canine diabetes and human diabetes Veterinarian consensus suggests increased active management via diet, exercise and insulin treatment can bring canine A1C values down into the 4 to 6 range.

FELINE A1C result of 8 to 12 suggests the need for increased active management of diabetes via diet, exercise and insulin. Felines may still be in the transitional phase at these levels with the ability to be managed back to a normal A1C level without the need for insulin. AAHA is a preferred resource for the types of insulin, dosages and general guidelines. Veterinary consensus for Feline treatment is to increase insulin dosage by 1 unit with the appropriate blood glucose monitoring at home and administering another A1C test in 70 days to assess A1C levels. Due to the difficulties in treating Felines via at-home exercise, diet and insulin regulating a Feline A1C down to 6 is desirable/attainable.

TESTING ONCE A QUARTER to monitor progression or control is recommended for any feline or canine with a result in the 8 to 12 range.

A1C result of 12 to 30 ("Uncontrolled or raging" diabetic level for canines and felines)

15% of the in-clinic diagnosed diabetic felines and canines tested at baycom have A1C values above 12. A1CARE is accurate up to an A1C value of 30 allowing the Veterinarian to know precisely if their treatment is lowering the A1C value over time even at these elevated levels. In addition, each sample is tested 4x to ensure CV values of < 5% giving the confidence needed to treat uncontrolled/raging diabetes knowing the A1C result is the most accurate diabetes test available to Veterinarians.

CANINE A1C result of greater 12 and up to 30 suggests the need for very active management of diabetes via diet, exercise and insulin. For cats and dogs multiply your A1C result x 30 to get a conservative average glucose reading for the last 70 days in felines and 110 days in canines. For example, A1C was 25 then multiply 25x30 to get an average glucose reading of 600+ for the last 70 days in a cat and 110 days in a dog. AAHA is a preferred resource for the types of insulin, dosages and general guidelines. Veterinary consensus for Canine treatment is to increase insulin dosage by 1 unit with the appropriate blood glucose monitoring at home and administering another A1C test in approximately 110 days to RE-assess the A1C level. Due to the similarities of canine diabetes and human diabetes Veterinarian consensus suggests very active management via diet, exercise and insulin treatment can bring canine A1C values down into the 4 to 6 range.

FELINE A1C result of greater than 12 suggests the need for very active management of diabetes via diet, exercise and insulin. Felines are likely no longer in the transitional phase at these levels now require continuous insulin treatment to be managed back to a A1C level of 6 to 8. AAHA is a preferred resource for the types of insulin, dosages and general guidelines. Veterinary consensus for Feline treatment is to increase insulin dosage by 1 unit with the appropriate blood glucose monitoring at home and administering another A1C test in 70 days to assess A1C levels. Due to the difficulties in treating Felines via at-home exercise, diet and insulin regulating a Feline A1C down to 6 is attainable/desirable.

TESTING ONCE A QUARTER to monitor treatment and A1C level is highly recommended for any feline or canine with a result in the 12 to 30 range. Peer reviewed articles available at www.catA1C.com and www.dogA1C.com

Advancing the standard of diabetes testing, 1-800-213-1439, results@baycomdiagnostics.com, www.baycomdiagnostics.com

Reference Levels for A1c

Peer Reviewed CANINE and FELINE A1c (glycohemoglobin) research papers on monitoring, diagnosing and levels [Normal] [Pre-Diabetic] [Diabetic] ranges of [0-4] [4-5] [6+] on the baycom diagnostic A1c report

https://www.aaha.org/professional/resources/diabetes_management.aspx

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- * Glycosylated Hemoglobin Concentration for Assessment of Glycemic Control in Diabetic Cats, Denise A. Elliott, Richard W. Nelson, Edward C. Feldman, and Larry A. Neal, "Results of this study suggest that evaluation of blood GHb concentration may be a clinically useful tool for monitoring glycemic control of diabetes in cats.
- * Glycosylated Hemoglobin in Dogs, Dennis, 1989, "The applicability of glycosylated hemoglobin A1c concentrations may be of clinical value"
- * Glycosylated Hemoglobin Measurement in Dogs and Cats: Implications for its Utility in diabetic Monitoring, J.B. DELACK AND L. STOGDALE, Department of Veterinary Clinical Studies, Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, Saskatchewan S7N 0 WO
- * LONG-TERM MONITORING OF THE DIABETIC DOG AND CAT Clinical Signs, Serial Blood Glucose Determinations, Urine Glucose, and Glycated Blood Proteins, DIABETES MELLITUS 0195-5616/95
- * Glycosylated hemoglobin is a good indicator of blood glucose status in Persian cats' Authors Authors and affiliations, H. BakhtiariM. TorkianEmail authorH. R. ShahbazkiaH. SadeghinezhadM. R. Ghorani, Comparative Clinical Pathology, November 2013, Volume 22, Issue 6, pp 1225–1228
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- * Measurement of glycosylated haemoglobins and glycosylated plasma proteins in animal models with diabetes or inappropriate hypoglycaemia, BJ Gould, PR Flatt, S Kotecha, S Collett… – Hormone and …, 1986 – thieme-connect.com, "The results show that the measurement of glycosylated blood proteins by affinity chromatography using Glycogel B provides a sensitive and reliable indicator of the recent glycaemic environment."
- * Defining the relationship between plasma glucose and HbA(1c): analysis of glucose profiles and HbA(1c) in the Diabetes Control and Complications Trial. Rohlfing CL1, Wiedmeyer HM, Little RR, England JD, Tennill A, Goldstein DE. "Knowing this relationship can help patients with diabetes and their healthcare providers set day-to-day targets for PG to achieve specific HbA(1c) goals."
- * Cornell College of Veterinary Medicine, ECLINPATH, "The canine erythrocyte lifespan varies from 110-120 days. The lifepan of feline erythrocytes is 65-76 days". http://www.eclinpath.com/hematology/morphologic-features/red-blood-cells/normal-erythrocytes/#canine