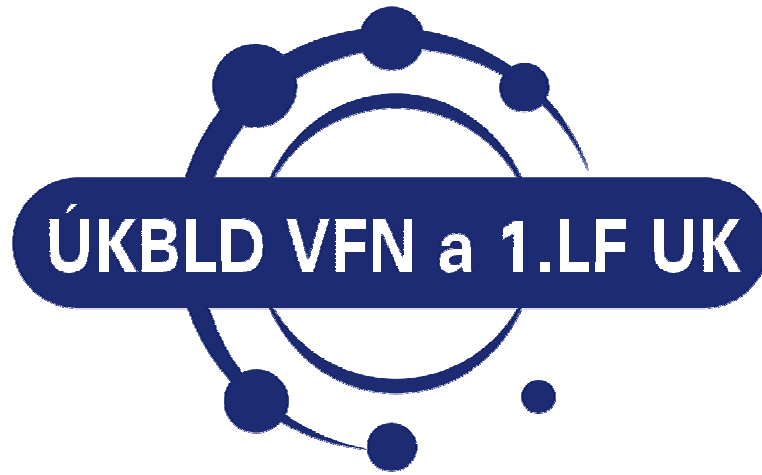


**HYPERTEXT
ENCYCLOPEDIA
OF LABORATORY
METHODS
ON THE WEB
AND CD-ROM**



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**Institute of Clinical Biochemistry
& Laboratory Diagnostics**

**1st Faculty of Medicine, General Faculty Hospital
Charles University, Prague, Czech Republic**

INTRODUCTION

The clinical chemistry and laboratory medicine is very fast developing and changing discipline of medicine. The world today is different from the world yesterday, in general, in medicine, in clinical chemistry. These aspects should be considered in our lectures and textbooks. The information technologies, computers and internet are developing and changing as well, but markedly faster. The modern, multimedia, electronic tools provide us with wide range of services, compared to classical, printed textbooks.

We have moved into the third millennium, we are preparing to enter the European Union, so we have to share our experiences, to communicate and to prepare educational materials in mutual interactivity with general aspects to be applicable for all of us. Electronically available educational documents on WWW sites could significantly contribute in accreditation process and international exchanges of students and teachers.

ENCYCLOPEDIA

ASPECTS OF QUALITY
AZI CERTIFIED

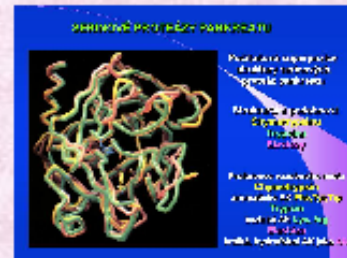


MiniEncyklopedie laboratorních metod v gastroenterologii

GastroLab

Stanovení chymotrypsinu (CHT) ve stolici.

Chymotrypsin - serinová proteáza, EC.3.4.21.1, s trypsinem a



Encyclopedia compendium of knowledge
(from Greek *enkyklios paideia*, “general education”)
reference work that contains information on all
branches of knowledge or that treats a **particular**
branch of knowledge in a comprehensive manner

Ref.: <http://www.britannica.com/eb/article?eu=108517>

EDUCATIONAL ASPECTS
POWER POINT IMAGES

30°C). Stanovení chymotrypsinu v stolici touto chromogenní metodou je jednoduché.

specifita a senzitivita stanovení je však relativně nízká - pro těžké p

funkce 67%, pro l

pozitivní vlivem m

intraluminální deg

RESEARCH ASPECTS
ABSTRACTS ON-LINE
WEB - MEDLINE, NLM

ASPECTS OF ROUTINE
LINK TO NATIONAL
REFERENCE DATABASE
WEB - MZCR

Reference

Takeda M. - Rinsho Byori 2002, [Medline - link](#)

Walkowiak J. - Pediatrics 2002, [Medline - link](#)

Kataoka K. - Digestion 1999, [Medline - link](#)

Kitagawa M. - Pancreas 1997, [Medline - link](#)

NČLP

GastroLab

PANCREAS

Amylase serum level
Amylase macroforms
Amylase in stool
Breath test - MTG
Elastase 1 serum level
Elastase 1 in stool
Chymotrypsin in stool
Carboxypeptidase CAPAP
Lipase serum level
Lipase macroforms
PABA test
Pancreolauryl test
Secretin-pancreozymin test
Trypsin serum level
Trypsinogen in urine
Trypsinogen TAP peptides

STOMACH

Breath test OABT
Breath test UBT
Gastric acidity, HCl analysis
Gastrin serum level
Helicobacter pylori detection
Hp. antigen in stool
Hp. breath test
Hp. antibodies in serum
Pepsinogen serum level

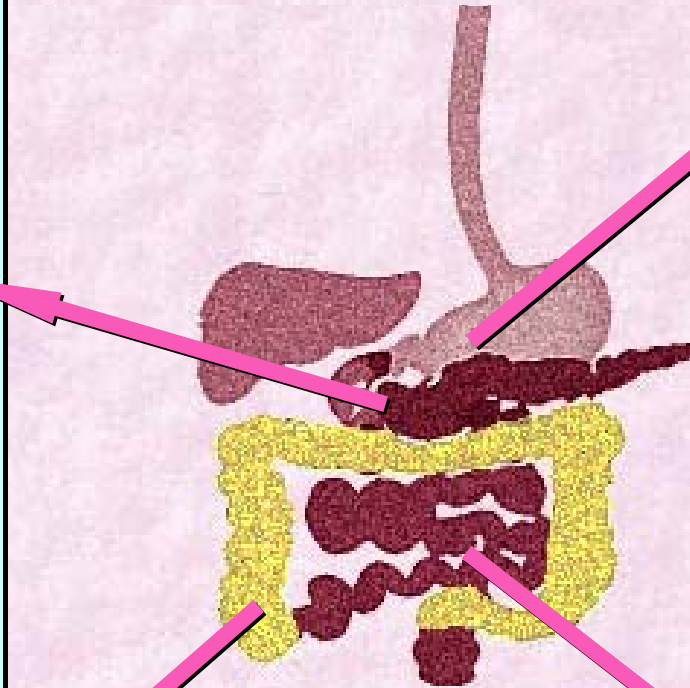
SMALL BOWEL

Anti-endomysium IgA
Anti-gliadin IgA, IgG
Anti-tTG IgA, IgG
Anti-gliadin/tTG in stool
A-vitamin tolerance test
 β -karoten serum level
 β -karoten tolerance test
Breath test with D-xylose
Breath test with lactose
Coeliac serology markers
Lactose tolerance test
Lactulose/mannitol LAMA-test
Xylose absorption test

LARGE BOWEL

Calprotectin in stool
Haemoccult, screening FOBT
Immunochemical FOBT
Occult blood in stool
Screening programs

**INTERACTIVE
CLICKABLE SELECTION
OF METHODS OR
ORGAN COLECTION**



ASPECT OF QUALITY

Internet (on-line) version of encyclopedia GastroLab is available as one of resources on the Web server of 1st Faculty of Medicine, Charles University in Prague

<http://glab.zde.cz/>

<http://www.lf1.cuni.cz/~kocna/glab/glency1.htm>

GastroLab **is certified by Czech authority** - "Asociace zdraví na internetu" (Association of Health on Net)

<http://www.azi.cz/>



Rules of certification (in short)

CREDIBILITY: Trustworthy source, author identified, can be contacted, known or respected authority, author's credentials, evidence of quality control, organizational support. The Webmaster will display his/her E-mail address clearly throughout the Web site.

CONFIDENTIALITY: Confidentiality of data relating to individual patients and visitors to a medical/health Web site, including their identity, is respected by this Web site. The Web site owners undertake to honour or exceed the legal requirements of medical/health information privacy.

ACCURACY: Current, date of update/revision, factual, detailed, exact, comprehensive, audience and purpose reflect intentions of completeness and accuracy

SUPPORT: Listed sources, contact information, available corroboration, claims supported, documentation supplied.

HONESTY IN ADVERTISING & EDITORIAL POLICY: If advertising is a source of funding it will be clearly stated.

EDUCATION

Department of Clinical Biochemistry and Laboratory Diagnostics
<http://www1.lf1.cuni.cz/ukb/>

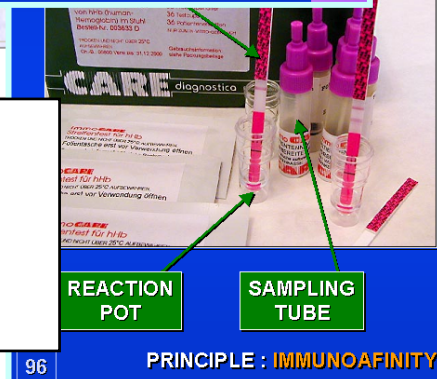
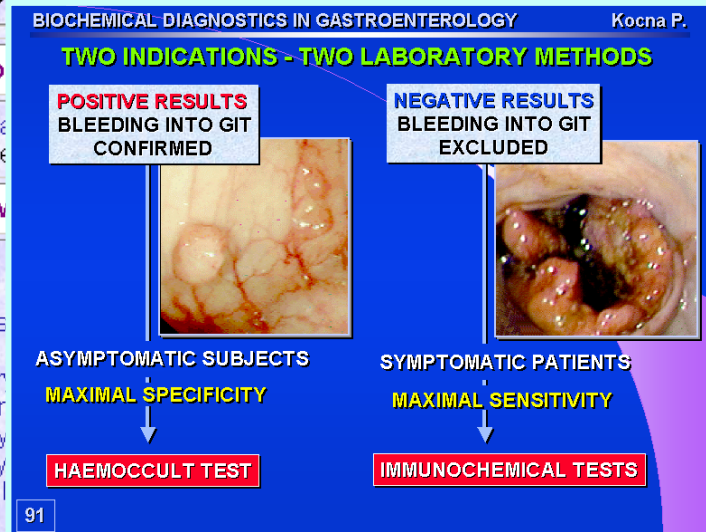
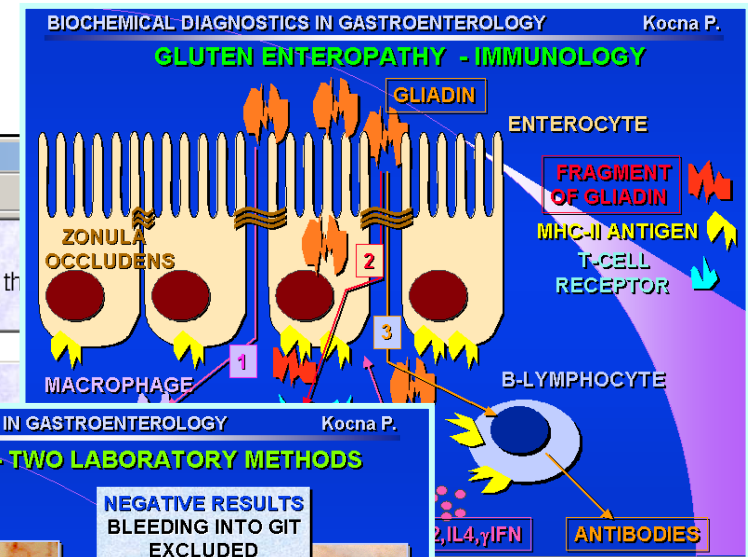
Department of Clinical Biochemistry and Laboratory Diagnostics
 General University Hospital a First Faculty of Medicine
 Charles University in Prague
 head: prof. MUDr. Tomáš Zima, DrSc.

Information on institute
 History (of the institute), who we are - where we are, contacts
 Studies
 Lectures in PowerPoint
 1st Fac Med:: medicine - foreign students, 5th year
 Other courses of studies: 1st Fac Med-Master's degree: medicine 5th year, medical technology and informatics 1st, 2nd year, 1st Fac Med-Bachelor's degree: medical technology 1st, 2nd year, nursing science 1st year (+ part-time courses 1st year), Inst Chem Tech-Master's degree: biomedical engineering 4st, 5th year Cz Tech Univ-Master's degree: clinical diagnostics 4th year, On-line teaching materials 1st Fac Med
 List of laboratory tests (database in Czech)
 List of employees and workplaces (database in Czech)

Reference laboratory
 Health, Czech Republic
 Laboratories - v

Central, central-s
 obstetric clinics,
 immunochemistry
 endocrinology and
 osteocentrum, cy
 gastroenterology
 dept., reference l

PowerPoint presentations, lectures are available on-line, in the Czech and English language, on the Institution's Web site. These images are used as well as sources for the GastroLab encyclopedia.



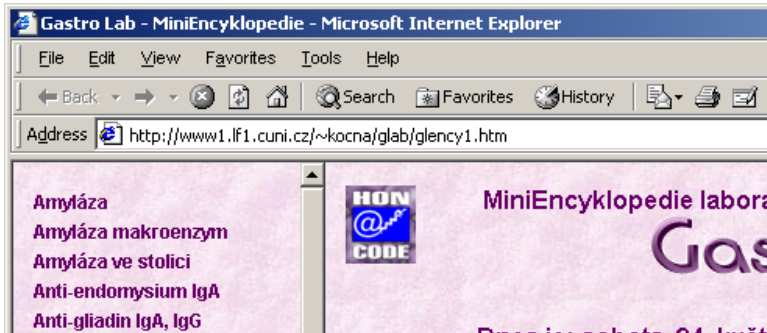
RESEARCH

Direct link - on line access to referenced abstracts, without searching - direct link with specific URL (incl. abstract uids) to **selected 237 papers** of NLM Medline database
Links to recent, news, **updated monthly**

The screenshot displays the NCBI PubMed web interface. At the top, the NCBI logo is on the left, and the PubMed logo with 'Library of Medicine' and 'NLM' is on the right. Below the logos is a navigation bar with tabs for PubMed, Nucleotide, Protein, Genome, Structure, PopSet, Taxonomy, OMIM, and Books. A search bar is present with a dropdown menu set to 'PubMed', a text input field, and 'Go' and 'Clear' buttons. Below the search bar are links for Limits, Preview/Index, History, Clipboard, and Details. A second navigation bar contains a 'Display' dropdown set to 'Abstract', a 'Sort' dropdown, and buttons for Save, Text, Clip Add, and Order. On the left side, there is a sidebar with links to 'About Entrez', 'Text Version', 'Entrez PubMed' (with sub-links: Overview, Help | FAQ, Tutorial, New/Noteworthy, E-Utilities), and 'PubMed Services' (with sub-links: Journal Browser, MeSH Browser, Single Citation Matcher, Batch Citation Matcher, Clinical Queries, LinkOut, Cubby). The main content area shows a search result for '1: Clin Chem Lab Med 2002 May;40(5):485-92'. To the right of this result are links for 'Related Articles', 'NEW', and 'Links'. The article title is 'Tissue transglutaminase-serology markers for coeliac disease.' by 'Kocna P, Vanickova Z, Perusicova J, Dvorak M.' The authors' affiliation is 'Institute of Clinical Biochemistry, 1st Faculty of Medicine & General Faculty Hospital, Charles University, Prague, Czech Republic. kocna@lf1.cuni.cz'. A large blue box highlights the direct URL: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12113293&dopt=Abstract. Below the URL, the beginning of the abstract is visible: 'Sero (AGA (EmA) and anti-tissue transglutaminase (atTG) IgG/IgA antibodies determined in 1451 serum samples, were analysed with respect to different screening algorithms. Determination of atTG using five ELISA methods was compared taking into account the impact of human recombinant antigen and

GASTROLAB on CD & WWW

GastroLab - 47 laboratory methods, 23 analytes with link to Reference Database NCLP, 38 images from PowerPoint education lectures, 237 links to Medline NLM abstracts



MiniEncyklopedie laboratorních metod v gastroenterologii

GastroLab



Dnes je: sobota 24. května 2003 17:50 hodin svátek má dnes Jana

On-line WWW - certified by Czech Internet Authority, updated regularly (1 - 2 months), published on the Web server of 1st Faculty of Medicine, Charles University, Prague
<http://www1.lf1.cuni.cz/~kocna/qlab/glency1.htm>
virtual URL: <http://qlab.zde.cz>

Dechový test s xylózou
Elastáza 1 v séru
Elastáza 1 ve stolici
Funkční testy
Gastrin
Haemocult, screeningový test

MiniEncyklopedie zahrnuje ve 47 heslech laboratorní metody. Citace odborné literatury odkazují na nejnovější poznatky propojeno s abstrakty databáze MEDLINE PubMed (on-line propojení s Internet). Jednotlivé metody jsou on-line propojeny s Národním číselníkem

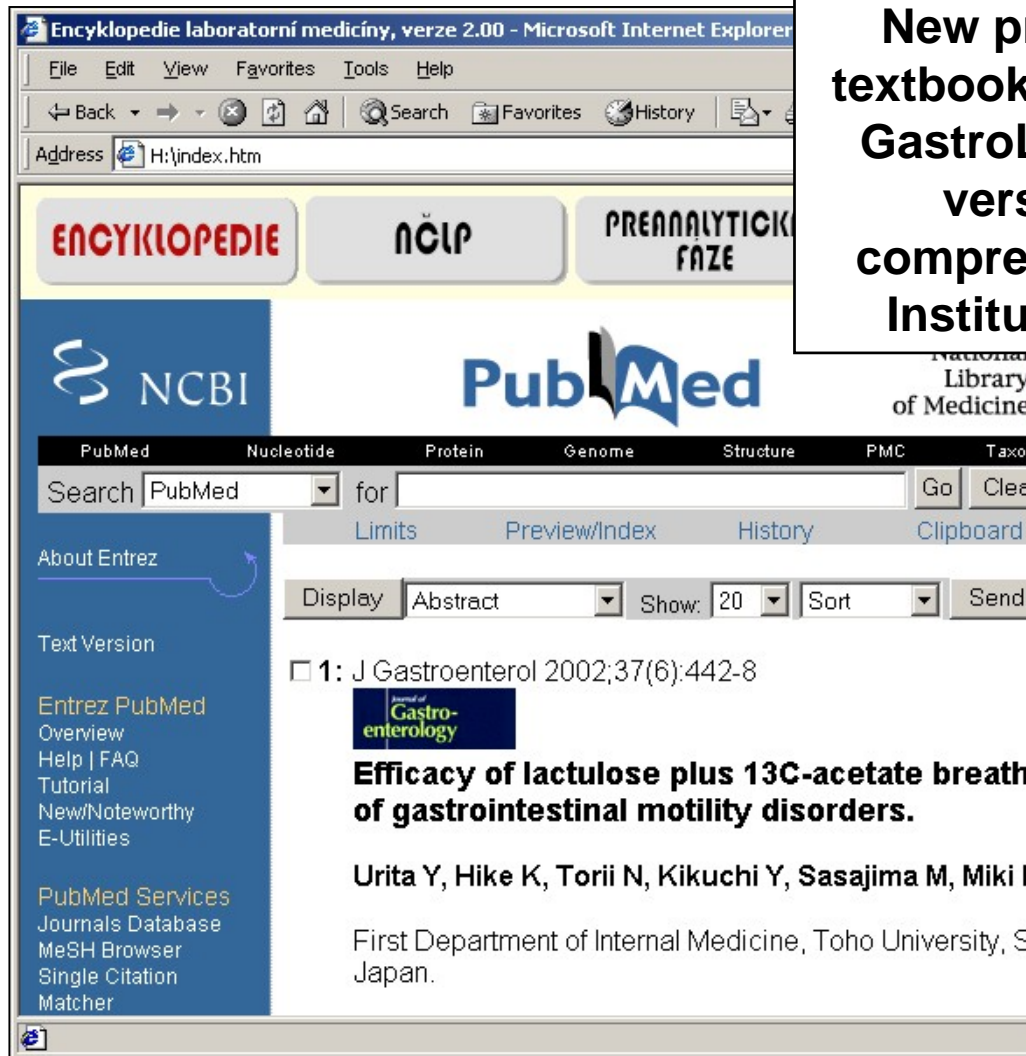
CD-ROM - version issued as educational activity Dialab sro Prague (Czech) in August 2002 and updated version in April 2003



ENCYCLOPEDIA OF LABORATORY MEDICINE

Encyclopedia of Laboratory Medicine

New project of Hypertext CD-ROM laboratory textbook, issued in December 2002 (version 1.0), GastroLab is included in the second, updated, version (June 2003). Main editor of this comprehensive encyclopedia is prof. A. Jabor, Institute of Postgraduate Education, Prague



CONCLUSION

Textbooks, lectures and other educational texts prepared in last years are on-line (mostly in Czech language) available on WWW server of 1st Faculty of Medicine of the Charles University in Prague on URL: <http://www.lf1.cuni.cz/ukb/>.

This presentaion is concerned to our last project of hypertext, multimedia encyclopedia of laboratory methods - **GastroLab** (URL: <http://gelab.zde.cz>). This pilot chapter is focused to gastroenterology. There are **47 laboratory methods**, described in concise text, supplemented with **38 PowerPoint images**, **237 on-line links** to last scientific papers (MEDLINE database) and direct links into National Registry of Laboratory Methods (NCLP = **National Reference Table of Laboratory Items**) on the server of Ministry of Health of the Czech Republic - URL: <http://www.mzcr.cz>.

The GastroLab is now included into another hypertext project - **Encyclopedia of Laboratory Medicine**. This CD-ROM publication was issued in December 2002, 2nd updated edition will be ready in June 2003, edited by prof. A. Jabor at co-workers (Institute of Postgraduate Education).