

# ELECTRONIC RESOURCES REVIEWS

**Natural Standard.** 1 Broadway, 14th Floor, Cambridge, MA 02142; 617.758.4270; fax, 617.758.4274; info@naturalstandard.com; http://www.naturalstandard.com; annual subscription \$99.00 Web, \$60.00 PDA; contact for institutional pricing; free trial available; PDA version including Handheldmed Reader requires 9MB.

The Natural Standard research collaboration, with a multidisciplinary editorial board, provides "access to alternative and complementary medicine information that is both peer-reviewed and evidence-based in nature" [1]. The Natural Standard collection of systematic reviews of alternative and complementary medicine is primarily geared toward clinicians who in-

tend to provide information to help make informed therapeutic decisions. Natural Standard is available in both Web and personal digital assistant (PDA), for Palm and PocketPC, formats.

When examining the content of the Natural Standard collection, it is important to note that several types of monographs are available depending on the level of information an individual requires. Professional Monographs are comprehensive, peer-reviewed, evidence-based systematic reviews for health care professionals. Bottom Line Herb-Supplement and Modality Monographs, brief evidence-based reviews derived from the Professional Monographs, are appropriate for both patients and professionals. Bottom Line Herb-Supple-

ment Monographs include information on effectiveness, side effects, interactions, dosing, pregnancy, and breastfeeding. Bottom Line Modality Monographs provide information relating to historic background, practitioner accreditation, and safety. Natural Standard/Harvard Medical School Monographs are abbreviated reviews for patients or professionals focusing on evidence-based information about safety, harm, interactions, and dosing. All research is graded for evidence on a five-point scale (Figure 1). The primary difference between the types of monographs lies in the overall depth and type of information presented for specific audiences.

When reviewing the various monographs available in Natural

**Figure 1**  
Natural Standard's grading system

**Natural Standard evidence-based validated grading rationale™**

- Grades reflect the level of available scientific evidence in support of the efficacy of a given therapy for a specific indication.
- Expert opinion and folkloric precedent are not included in this assessment, and are reflected in a separate section of each monograph ("Strength of Expert Opinion and Historic/Folkloric Precedent").
- Evidence of harm is considered separately, the below grades apply only to evidence of benefit.

Level of Evidence Grade	Criteria
A (Strong Scientific Evidence)	Statistically significant evidence of benefit from >2 properly randomized trials (RCTs), OR evidence from one properly conducted RCT AND one properly conducted meta-analysis, OR evidence from multiple RCTs with a clear majority of the properly conducted trials showing statistically significant evidence of benefit AND with supporting evidence in basic science, animal studies, or theory.
B (Good Scientific Evidence)	Statistically significant evidence of benefit from 1-2 properly randomized trials, OR evidence of benefit from ≥1 properly conducted meta-analysis OR evidence of benefit from >1 cohort/case-control/non-randomized trials AND with supporting evidence in basic science, animal studies, or theory.
C (Unclear or conflicting scientific evidence)	Evidence of benefit from ≥1 small RCT(s) without adequate size, power, statistical significance, or quality of design by objective criteria,* OR conflicting evidence from multiple RCTs without a clear majority of the properly conducted trials showing evidence of benefit or ineffectiveness, OR evidence of benefit from ≥1 cohort/case-control/non-randomized trials AND without supporting evidence in basic science, animal studies, or theory, OR evidence of efficacy only from basic science, animal studies, or theory.
D (Fair Negative Scientific Evidence)	Statistically significant negative evidence (i.e., lack of evidence of benefit) from cohort/case-control/non-randomized trials, AND evidence in basic science, animal studies, or theory suggesting a lack of benefit.
F (Strong Negative Scientific Evidence)	Statistically significant negative evidence (i.e. lack of evidence of benefit) from ≥1 properly randomized adequately powered trial(s) of high-quality design by objective criteria.*
Lack of Evidence†	Unable to evaluate efficacy due to lack of adequate available human data.

\* Objective criteria are derived from validated instruments for evaluating study quality, including the 5-point scale developed by Jadad et al., in which a score below 4 is considered to indicate lesser quality methodologically (Jadad AR, Moore RA, Carroll D, Jenkinson C, Reynolds DJ, Gavaghan DJ, McQuay HJ. Assessing the quality of reports of randomized clinical trials: is blinding necessary? *Controlled Clinical Trials* 1996; 17(1):1-12).

† Listed separately in monographs in the "Historical or Theoretical Uses which Lack Sufficient Evidence" section.

Standard, it appears that the information provided is clear, concise, and presented using a specific set of guidelines depending on the type of monograph. The scope of coverage seems to be quite generous. Natural Standard covers a great deal of information pertaining to complementary and alternative medicine. Search strategies are conducted in print resources in addition to the usual online databases (e.g., PubMed, CINAHL, the Cochrane Library, and EMBASE). Useful images of various herbs and supplements are included in both the Bottom Line Modality and Professional Monographs. The quality of the information can be verified using the descriptions of the selection criteria, data analyses, reviews, and update process. This information provides detailed knowledge of the methodology used to obtain, synthesize, and summarize information disseminated via Natural Standard.

The Patient Information Database, with links to the Bottom Line Modality Monographs, is the Natural Standard component that is primarily geared toward patients and consumers. Natural Standard/Harvard Medical School Monographs are also included on selected topics. The Patient Information Database provides a wide variety of information on herbs and conditions, including background, scientific evidence (including the grading system mentioned above), traditional and theoretical usage, dosing, safety, interactions, and a bibliography. The patient information can be printed as a formatted text file. Patients and consumers can review the methodology used to conduct, analyze, and review the literature used to create the associated information in Natural Standard. Patient information files have been produced in an effective manner by focusing primarily on the type of information a patient would seek. Terminology has been geared toward the lay person without removing critical content, and the patient information files are easy to search using the sidebar menu for navigation. Standard disclaimers

and date of last update are also provided on each patient information file. The Patient Information Database is a useful, thorough, and integral component of the Natural Standard Database.

Natural Standard also provides bibliographies on various topics with links to the National Library of Medicine's PubMed database. A "News" section provides conference information; Natural Standard-produced summaries of conference proceedings; and announcements of scientific publications, safety concerns, and product recalls. Accredited continuing medical education courses in complementary and alternative medicine are available and are based on evidence-based informational reviews. One can choose from several continuing education modules, and additional modules from multiple health care disciplines are being created. Natural Standard also provides customized research reports, clinical reviews, and clinical trial design protocols for an extra charge. Print reference books of evidence-based systematic reviews of herbs and supplements are also available.

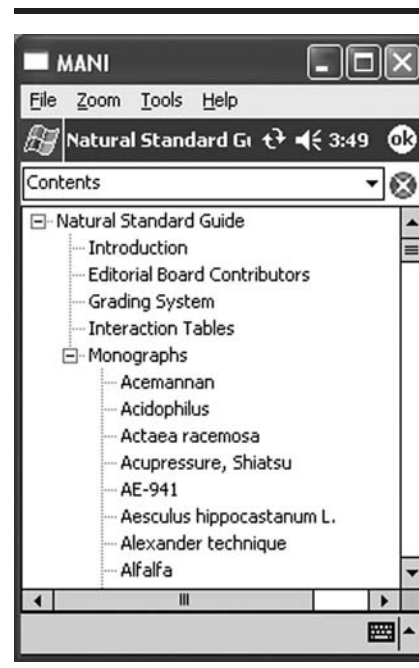
The Natural Standard Website provides five databases: Herbs & Supplements, Condition Center, Alternative Modalities, Dictionary, and Patient Information. All databases can be searched individually or using the main search box, which spans the content of all five databases. The A-Z browsing list for each database helps make this Website user friendly.

It is important to note that the PDA version of Natural Standard, sold by Handheldmed, only includes the Bottom Line Herb-Supplement Monographs. A link to the PDA version is hidden on the Products page of the Natural Standard Website. The Handheldmed EZ Reader is required to use Natural Standard on a Palm or PocketPC PDA and is included in the purchase price. A seven-day trial version of Natural Standard is available for download on the Handheldmed Website.

Overall, information in both the

**Figure 2**

Personal digital assistant (PDA) version of Natural Standard

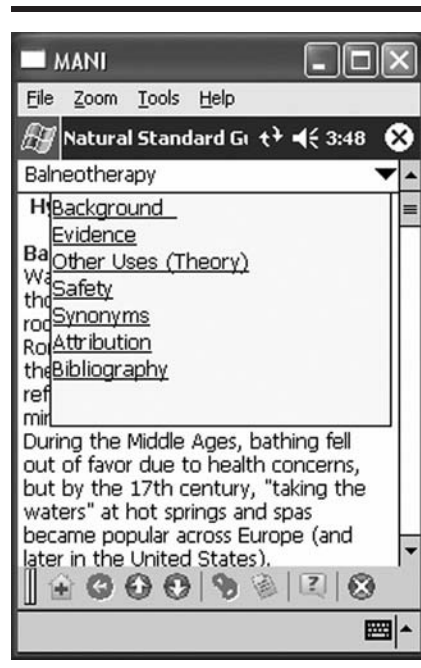


Web and PDA formats is easily accessible. The information provided in Natural Standard is well written and therefore easy to comprehend for clinicians and other health care providers. The PDA version is easy to access (Figure 2), and drop-down menus are provided to allow users to quickly navigate to information they are interested in (Figure 3).

Some areas for improvement lie in developing an option to provide content in portable document format (PDF), providing an "email document" feature, providing links from the content in the main databases (Herbs & Supplements, Condition Center, Alternative Modalities) to the Natural Standard dictionary, producing and making content available in multiple languages, and developing a separate image database for herbs and associated conditions. Having a clear link to the PDA version on the Natural Standard home page would also be ideal to avoid confusion when searching for this particular component.

Natural Standard is a useful product relating to the field of complementary and alternative medi-

**Figure 3**  
Drop-down menus in Natural Standard's PDA version



cine and would be a valuable resource for clinical and academic libraries.

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## References

1. NATURAL STANDARD. About us 2005. [Web document]. 2005. [cited 14 May 2005]. <<http://www.naturalstandard.com>>.

**¡A su salud!: Spanish for Health Professionals. Version 1.0.** Yale University Press, P.O. Box 209040, New Haven, CT 06520-9040; 800.405.1619; fax, 800.406.9145; tim.shea@yale.edu; <http://www.yalebooks.com/salud/>; \$95.00 including public performance rights; Windows 2000/XP or newer, Windows Media Player 9 or newer, DVD, microphone, and speakers; technical compatibility utility available at <http://yalepress.yale.edu/>

[yupbooks.com/salud/techsupport/](http://yupbooks.com/salud/techsupport/); ISBN: 0-30010-363-8.

## “¡A su salud!” review in English

Early in 2005, Yale University Press (YUP) released “¡A su salud!: Spanish for Health Professionals,” a multimedia-based course joining the growing number of Spanish language courses for medical professionals developed by University of North Carolina at Chapel Hill’s health care and language professionals, faculty, and staff. The course is designed to help English-speaking health professionals and students in the health professions and social work improve their communication with Spanish-speaking patients and to familiarize them with health-related issues affecting the recent Hispanic immigrant community in the United States. An intermediate-level knowledge of Spanish is recommended for this course.

The “¡A su salud! (To Your Health!)” course packet consists of two DVDs with one CD-ROM installation disk for setup information, Web resources, and a workbook (*Cuaderno*). Because of its versatility of formats, this product could be used for self-paced study, distance learning, traditional classroom instruction, or a combination of settings. This course uniquely encompasses a Spanish-language course in the context of the public health arena and the Hispanic immigrant culture to make learning Spanish more meaningful and useful to the student.

Though the authors claim that the three components of “¡A su salud!” are equally important, the DVDs are the heart of the course and could be used alone. The two DVDs work with a DVD player in a computer or television. They contain a variety of interactive and creative learning activities with video clips in a *telenovela* (soap opera) style plot reminiscent of *Destinos*, an earlier, popular Spanish-language telecourse produced by McGraw-Hill.

Each DVD contains two *Unidades* (Units), each of which is divided

into four sections: “*Preparación* (Preparation),” “*Repaso* (Review),” “*Historia* (History),” and “*Aplicación* (Application).” As their Spanish titles indicate, these sections help students acquire background information in “*Preparación*,” review the previous episode in “*Repaso*,” view the unit’s episode or main plot in “*Historia*,” and apply the language lessons in a specific cultural and health context in “*Aplicación*.” Students can easily view the four units in any order, and they can go back and review units as often as needed. Students will see that the plot, delivered in the eight video clips and exercises in “*Historia*,” is reinforced in the exercises on the DVDs, in the workbook, and in some of the Web resources.

The ninety-six-minute *Episodios* (two *Episodios* in each unit) were produced with a cast of twenty-six actors to portray some of the linguistic, social, and racial diversity of Latin American Spanish-speaking countries. Set in a rural community, the *telenovela* takes the students inside the lives of a group of Hispanic health professionals, their families, and their patients in a fictional community health center, *La Comunidad*. The characters include an American nurse who is learning Spanish. Despite the overly dramatic tone of the video clips, the actors convincingly portray their characters and convey an engaging plot with a rich variety of Spanish accents, dialects, and body language, as well as other silent forms of communication. In some units, students can listen to the actors’ dialogue, read subtitles, and follow along with English-language lessons.

In a health context, students are asked to reflect on specific medical issues they might encounter with their patients, such as pregnancy and HIV/AIDS. They can also listen to interviews and analyze cultural expectations of Spanish-speaking patients such as the different immunization standards of the United States and Latin American countries. Interestingly, cultural stereotypes, some profanities,

and Spanish colloquialisms are used, adding to the realism of the video clips. Universal issues such as the immigrants' longing for their cultural roots and difficulties in learning English are also addressed.

The workbook supplements the primary content of the DVDs by providing additional grammar and vocabulary exercises, background information, and further grammatical and cultural explanations, which are also based on the sequence of episodes and exercises on the DVDs. Answers to exercise questions are in the back of the workbook.

The links to the Web resources component of the course are accessible through the DVDs and include a course Website and the *Recursos* site. The course Website comes with an instructor's manual in portable document format (PDF) and provides additional interactive exercises and other resources introduced on the DVDs. Students with Internet access can also access a list of relevant Web resources, such as online dictionaries and patient education materials, on the *Recursos* site.

The DVDs have well-developed instructional design principles and applications: objectives, easy-to-follow installation instructions, trouble-shooting instructions, help screens, self-assessment exercises, explanations for graded quizzes, printable unit tests, and a time estimate for completing each exercise. In some activities, students can record their audio responses, redo exercises, review video clips and files, and save and print their responses. Exercises are available in multiple-choice and short-essay formats. However, the video clips cannot be fast-forwarded, and the translation button located on the bottom left-hand side of slides in all lessons is barely visible. Additionally, no feedback is available for some exercises, and viewing requires a lot of clicking to select answers and proceed in each section.

The benefits of providing culturally relevant lessons for improving acquisition and comprehension of

Spanish in a health care setting outweigh the technical flaws of the DVDs. This bilingual course is well suited as part of a Web-based course or traditional classroom instruction. However, it is not recommended for self-paced study due to the length and intensity of materials.

### **"¡A su salud!" review in Spanish**

A principios del 2005, Yale University Press (YUP) publicó "¡A su salud!: Spanish for Health Professionals," un curso en multimedia que ahora forma parte del crecimiento de cursos para enseñar español a profesionales médicos. Desarrollado por la facultad, personal, y profesionales de salud y lengua de la Universidad de Carolina del Norte en Chapel Hill, el curso está diseñado para ayudar al profesional médico y a los estudiantes en las profesiones médicas, y a los trabajadores sociales que hablan inglés, a mejorar su comunicación con pacientes hispanohablantes y familiarizarlos con temas que afectan la comunidad inmigrante hispana reciente en los Estados Unidos. Es recomendable un nivel intermedio de español para este curso.

El paquete del curso de "¡A su salud!" consiste de dos DVDs con un disco CD-ROM para poner el programa, recursos de Internet, y un cuaderno. Por su variedad de formatos disponibles, este producto se puede adaptar para estudio propio, enseñanza de larga distancia por medio de un curso ofrecido por una institución educacional, interacción tradicional de clase, o por medio de una combinación de formatos. "¡A su salud!" únicamente abarca un curso para el aprendizaje del español con el contexto de la salud pública y la cultura hispana inmigrante para hacer el aprendizaje del español más significativo y útil para el estudiante.

A pesar de que los autores afirman que los tres componentes de "¡A su salud!" tienen el mismo significado e importancia, los DVDs son el corazón del curso y se pudieran usar solos. Los dos DVDs funcionan con DVD players en

computadoras o en televisores. Los DVDs contienen una variedad de actividades interactivas y creativas incluyendo clips de video con una historia a estilo de telenovela. El estilo de telenovela es parecido al de *Destinos*, un curso de español de televisión producido por McGraw-Hill.

Cada DVD contiene dos unidades. Cada unidad está dividida en cuatro secciones: "Preparación," "Repaso," "Historia," y "Aplicación." Estas secciones, así como indica su título, ayudan a los estudiantes a adquirir más información en "Preparación"; repasar el episodio previo en "Repaso"; mirar el episodio de la unidad o la historia principal en "Historia"; y aplicar en "Aplicación" las lecciones en un contexto médico y cultural específico. Los estudiantes pueden fácilmente seguir las unidades en cualquier orden, y pueden repasar las unidades como sea necesario. También, los estudiantes pueden mirar la historia del DVD en ocho clips de video y ejercicios que corresponden a las secciones del cuaderno y algunos de los recursos del Internet.

Los episodios de noventa y seis minutos (hay dos episodios en cada unidad) fueron producidos con un equipo de veintiseis actores que representan parte de la diversidad lingüística, social, y racial de Hispanoamérica. Filmada en una comunidad rural, la telenovela lleva a los estudiantes adentro de las vidas de un grupo de profesionales de salud, sus familias, y sus pacientes en una clínica de salud llamada La Comunidad. Los protagonistas incluyen una enfermera norte americana quien está aprendiendo español. A pesar del tono dramático de los clips de video, los actores representan sus papeles con una rica variedad de acentos, dialectos, expresiones locales, y lenguaje corporal así como otras formas de comunicación para convencer a su público. En algunas unidades, los estudiantes pueden escuchar el diálogo de los actores, leer subtítulos, y al continuar con la lección en inglés.

En un contexto de salud, se les pide a los estudiantes a reflexionar

sobre enfermedades cotidianas y de propagación como el embarazo y el SIDA-VIH. Los estudiantes también pueden escuchar entrevistas y analizar perspectivas culturales de los pacientes como los diferentes requisitos nacionales en los Estados Unidos y países de América Latina. Interesantemente, estereotípicos y algunas profanidades son usadas, añadiéndole al realismo de los clips de video. Además, cuestiones universales de los inmigrantes como su busca por sus raíces natales y dificultades en aprender inglés son descritas.

El cuaderno suplementa el contenido primario de los DVDs al ofrecer ejercicios adicionales de gramática y vocabulario, más información fondo, y explicaciones que son basadas en los episodios y ejercicios de los DVDs. También las respuestas a las preguntas en los ejercicios se encuentran detrás de el cuaderno.

Los recursos del Internet que forman parte de "¡A su salud!" son accesibles en los DVDs e incluyen

un sitio Web para el curso y enlaces pertinente en el sitio Recursos. El sitio Web del curso viene con un manual para el maestro (en PDF) y proporciona ejercicios interactivos y otros recursos introducidos en los DVDs. Estudiantes con acceso al Internet, pueden mirar el sitio Recursos, una lista de enlaces como diccionarios y materiales para educar al paciente.

Los DVDs tienen características de buenos diseños de instrucción electrónicos en sus aplicaciones y principios: objetivos, instrucciones para instalar el programa, enlaces para ayuda, explicaciones de respuestas en pruebas y exámenes, exámenes que se pueden imprimir, y la aproximación del tiempo necesario para completar los ejercicios. En algunas actividades, los estudiantes pueden grabar sus propias voces, volver a hacer los ejercicios, repasar los clips de video, y guardar e imprimir respuestas. Los ejercicios están disponibles en formatos como tipo selección y en composiciones cortas. No hay un botón

para avanzar rápidamente en los clips de video, y es difícil encontrar el botón que se usa para traducir en todas las lecciones. Además, no hay retroalimentación disponible para algunos ejercicios, y para progresar con los ejercicios, se requiere que el estudiante haga bastantes clics.

A pesar de esto, los beneficios por proveer lecciones culturales para mejorar el logro y la comprensión del español indemniza los problemas técnicos del programa. Es recomendable usar este curso bilingüe como un componente central de una clase en el Internet o como parte una clase de enseñanza. Sin embargo, no se recomienda como estudio propio por la longitud e intensidad de los materiales.

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